

THE IMPACT OF MUSIC- VS. ATHLETICS-BASED SOCIAL SKILLS TRAINING ON
ADULT- AND SELF-RATINGS OF SOCIAL COMPETENCE AND ANTISOCIAL
BEHAVIOR OF AT-RISK YOUTH

By

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ABSTRACT

The purpose of this study was to evaluate the effectiveness of a music therapy-based social skills training program compared to an athletics-based social skills training program for children with social skills deficits and interfering behavior problems. Eight fifth and sixth grade boys age 10-11 who had displayed social skills deficits or interfering behaviors in the school setting participated in five 1-hour social skills training (SST) sessions once a week for five weeks. The participants rated themselves on measures of Social Competence and Antisocial Behavior at pretest and posttest using the Multisource Assessment of Social Competence Scale (MASCS). The participants' homeroom teacher and para-educator rated each participant on measures of Social Competence and Antisocial Behavior using the School Social Behavior Scales, Second Edition (SSBS-2). Results were mixed and varied according to the rater. Teacher ratings of multiple dimensions of Antisocial Behavior indicated the Music Group improved significantly more than the Basketball Group and indicated Defiant/Disruptive increased for the Basketball Group. Conversely, para-educator ratings of Social Competence and Antisocial Behavior indicated the Basketball Group improved while a decrease in functioning was observed for the music group although no significant results were obtained. Self-ratings of Social Competence decreased in both groups from pretest to posttest with the Music Group ratings decreasing more than the Basketball Group. Self-ratings of Antisocial Behavior did not reveal any significant differences between or within groups. Future researchers should continue to work with small groups (three to six participants per group) but should repeat each condition with multiple groups in order to increase the sample size overall. Future studies should also consider increasing the number of sessions per week and extending the overall length of participation in an SST program.

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CHAPTER 1

INTRODUCTION

Success in relationships, school, and work requires good social skills. Children who develop strong social skills are more likely to be popular among peers, succeed academically, and become contributing members of society as adults (Woodward & Fergusson, 2000).

Children who fail to develop positive relationships and connections with their community have difficulty adjusting to school and are at greater risk for suspension, school dropout, substance abuse, and mental health problems (Bond et al., 2007; Gresham & Elliot, 1993). They are also more likely to engage in criminal activity and other antisocial behavior (Caldarella & Merrell, 1997). Without intervention, these children often struggle to develop the social skills they need to succeed in life.

Social skills are behaviors that allow children to perform competently while interacting with members of significant social groups such as parents, teachers, and peers (Gresham, 2002). These three social groups have unique expectations and value somewhat different sets of social skills and personality traits in children. Children look up to peers who excel academically or possess desirable personal traits such as a good sense of humor or athletic ability (Newcomb, Bukowski, & Pattee, 1993). Parents think their children need to develop good character qualities such as honesty and respect for others as well important social skills such as the ability to take risks to initiate relationships and the ability to respond appropriately to social cues (Kolb & Hanley-Maxwell, 2003). Teachers expect children to display self-control and engage in cooperative behavior in the classroom (Lane, Givner, & Pierson, 2004). These perspectives indicate children must develop a variety of social skills to be successful in different environments.

Children with social skills deficits fail to display socially valued behaviors frequently enough to succeed in important social environments such as school and at home. This is likely because they do not possess the skills yet, lack motivation to use the skills, or have difficulty executing the skills. Other children may not have a social skills deficit, but still display other socially inappropriate behaviors that limit their social success (Gresham, 2002). Antisocial behavior enables some children to meet their needs more easily than poorly executed pro-social behavior (e.g. bullying peers is the most effective way to get the things they want). These environmental consequences reinforce and maintain maladaptive behaviors (Gresham, Sugai, & Horner, 2001).

Social experiences with parents, teachers, and other important individuals have a strong impact on the children's social development early in life. Children who fail to form a secure attachment with their primary caregiver in the earliest stages of life are likely to have great difficulty forming healthy relationships with others as they age (Burkhardt-Mramor, 1996). Children also learn how to express and manage their emotions by following the example of their primary caregivers (Lewis & Michalsen, 1983). Children develop similar relationships with their teachers when they begin attending school. Academic success is partially reliant upon the teacher's instructional approach and children's feelings about their relationship with their school, peers, and teachers (Connell, 1990; Kelly & Turner, 2009; Pianta, Steinberg, & Rollins, 1995). Social Skills Training (SST) may help alleviate some of the difficulties these children face in their social environments (Gresham, 2002)

Research involving various approaches to teaching children social skills reveals mixed results. Studies using highly structured training approaches produce poor or mixed results due to poor implementation, too few hours of instruction, failure to adequately identify the type of

social skills deficit, and poor generalization and maintenance due to training students in unnatural settings (Bellini, Peters, Benner, & Hopf, 2007). Lack of follow-up data also makes it difficult to determine the effectiveness of social skills interventions (Durlak, Weissburg, & Pachan, 2010). The data does not yet indicate whether or not children participating in these types of training programs consistently reach the same positive outcomes.

Musical environments are replete with opportunities for social development. Music therapy research addresses social skills development among various populations of children including premature infants (Walworth, 2009), survivors of trauma (Slotoroff, 1994), young offenders (Rio & Tenny, 2002), homeless children (Staum, 1993; Staum & Brotons, 1995), aggressive adolescent boys (Rickson & Watkins, 2003), at-risk youth (Gooding, 2011) and children with developmental disabilities (Gunsberg, 1988; Humpal, 1991), autism (Brownell, 2002; Pasiali, 2004; Reid, Hill, Rawers, & Montegar, 1975), attachment disorder (Burkhardt-Mramor, 1996), and emotional disorders (Eidson, 1989).

These studies incorporate a wide range of goals including managing anger (Slotoroff, 1994), increasing self-expression (Edgerton, 1990), improving self-esteem (Rio & Tenney, 2002, Folsom, 1968), improving problem-solving skills (Staum, 1993), decreasing socially inappropriate behavior (Brownell, 2002; Pasiali, 2004; Reid, et al., 1975), increasing social responses and social interaction (Gunsberg, 1988; Humpal, 1991; Walworth, 2009), fostering the formation of healthy relationships (Burkhardt-Mramor, 1996), facilitating healthy family interactions during family therapy (Miller, 1994; Pasiali, 2012), increasing cooperation, increasing on-task behavior, and improving self-management and peer relationship skills (Eidson, 1989; Gooding, 2011; Staum & Brotons, 1995).

Although music therapy researchers frequently address social skills development, there is still a need for more data to confirm the effectiveness of specific music-based interventions. Some studies provide descriptions of interventions based on clinical experience or theoretical models without providing relevant data to support the effectiveness of those interventions (Behrens, 1988; Friedlander, 1994; Gardstrom, 1987; Hong, Hussey, & Heng, 1998; Miller, 1994; Slotoroff, 1994). Others provide initial support for music therapy interventions based on evidence from a small number of case studies (Brownell, 2002; Burkhardt-Mramor, 1996; Edgerton, 1990; Folsom, 1968; Pasiali, 2004; Reid, et al., 1975; Rio & Tenney, 2002; Werbner, 1968). Some experimental studies with small subject pools indicate music-based social skills interventions are beneficial for clients (Cassity, 1976, 1981; Eidson, 1989; Gooding, 2011; Gunsberg, 1988; Humpal, 1991; Pasiali, 2012; Walworth, 2009). Results from other experimental studies either fail to provide evidence to support the use of music-based social skills interventions, possibly due to confounding variables present during the course of the study (Staum, 1993; Staum & Brotons, 1995), or produce mixed results that have not yet been supported with additional data (Rickson & Watkins, 2003). Music therapy researchers need to support this initial body of work with more evidence that music-based social skills training offers an effective means of helping children develop positive social skills.

This study aimed to add breadth to the existing knowledge of the effectiveness of social skills training programs by exploring the impact of a music-based social skills training program on cooperation and self-control, as compared to a sports-based social skills training program. The results provide useful information for music therapists and social skills trainers from all professional disciplines who seek to create more effective social skills training programs for children with social skills deficits or a history of anti-social behavior.

CHAPTER 2

REVIEW OF LITERATURE

Children need social skills to thrive with others at home, school, in their neighborhood, and in other community settings such as restaurants, church, and sports clubs. Emotional and behavioral disorders, learning disabilities, intellectual disabilities, and developmental disabilities often make it difficult for children to develop and practice the social skills they need to succeed in these settings (Elliot & Gresham, 1991). In order to help these children avoid the negative outcomes associated with poor social skills, researchers must first describe the nature of social skills development. Several research-based approaches to social skills training appear in the literature and often overlap with music-based approaches to treating children who lack social skills.

Definitions of Social Skills

Three definitions of social skills provide the foundation for the majority of social skills research over the past several decades: peer acceptance, behavioral, and social validity definitions. Each of these definitions has practical strengths and limitations. In the peer acceptance approach, group members rank each other according to popularity or status within the group (Cassity, 1976). This approach is limited because ratings do not reveal why students assign high or low ratings to their peers (Matson, 2009). Behavioral definitions focus on increasing behaviors that others are likely to reinforce in natural settings (Elliot & Gresham, 1987; Gresham, 1986). This approach provides more information and has greater potential for practical application than the peer acceptance approach because it identifies the antecedents and consequences of the target social behavior and incorporates them into treatment (Elliot & Gresham, 1987). While the behavioral approach may provide an effective means of improving

targeted social behaviors, it does not use scientific methods to identify treatment goals and ensure the target behaviors are socially significant (Matson, 2009). The social validity definition makes up for these limitations by focusing on increasing specific behaviors that key individuals such as parents, teachers, and peers consider to be important (Gresham 2002). Programs that use social validity assessments are more likely to see long-term success because these key individuals provide more support when they have the opportunity to be involved in goal identification, implementation, and evaluation of outcomes (Marchant, Heath, & Miramontes, 2012).

Within the social validity framework, it is important to recognize the difference between *social skills* and *social competence*. *Social skills* are the distinct abilities that enable a child to perform competently on a social task. *Social competence* refers to the evaluation by others of a child's ability to perform a specific social task adequately and consistently. Furthermore, a child who has achieved competence in one skill does not necessarily perform competently when using other social skills (McFall, 1982). Teachers, parents, peers, and other people in the child's social environment determine whether or not a child executes social tasks competently and provide valuable information for assessment purposes (Gresham, 2002).

Socially Important Behaviors

Reports from children's parents, teachers, and peers identify social behaviors that are necessary to successfully interact within these social groups (Kolb & Hanley-Maxwell, 2003; Lane, Givner, & Pierson, 2004; Newcomb, Bukowski, & Pattee, 1993). Children need to develop skills in the areas of assertion, compliance, self-management, peer relations, and academic skills to be socially successful (Caldarella & Merrell, 1997). Examples include inviting peers to join activities (Assertion), following a teacher's instructions (Compliance),

cooperating with peers without prompting (Self-management), complimenting others (Peer Relations), and completing assignments on time (Academic skills) (Caldarella & Merrell, 1997; Elliot & Gresham, 1991). Children who do not develop these skills may instead develop an opposing problem behavior such as conduct disorder, attention deficit disorder, oppositional defiant disorder, or social withdrawal (Caldarella & Merrell, 1997).

Differences between the values of parents, teachers, and peers illustrate the importance of utilizing multiple sources of information to evaluate social skills and design effective interventions so that children can succeed socially in multiple settings and situations (Ruffalo & Elliott, 1997). Parents' perspectives on important social skills often differ from teachers', possibly because parents observe their children over a longer period of time in a wider variety of settings and therefore have different expectations (Ruffalo & Elliot, 1997). Parents of middle school children with high-incidence disabilities such as learning disabilities, cognitive disabilities, and emotional or behavioral disorders identify good character and the ability to get along with others as necessary skills for social success. In order to get along with others children need empathy, self-control, the willingness to take risks in initiating relationships, and the ability to interpret social cues and respond appropriately. Parents further describe character development as the expansion of moral values such as respect for others, honesty, and responsibility (Kolb & Hanley-Maxwell, 2003).

Differences in the expectations of teachers and peers demonstrate the need for children to adapt social behaviors to the demands of different social groups. Teachers indicate that self-control and cooperation skills are paramount for success in the classroom. Following directions, attending to instructions, controlling temper, using free time appropriately, getting along with diverse groups, and reacting appropriately to conflicts are behaviors that help maintain a positive

learning environment (Lane, Givner, & Pierson, 2004). Children value sociability and cognitive skills in their same-age peers. More specifically, children rate popular peers highly in the skill areas of problem-solving, friendship, helpfulness, and other desirable social traits such as athleticism, sense of humor, and self-esteem (Newcomb, Bukowski, & Pattee, 1993). Children who are well adjusted in school and have good interpersonal relationships demonstrate social competence by consistently performing well in one or more of these social skill areas. Those who fail to perform consistently well in these areas may have a *social skills deficit*. Fortunately, these children may receive training in the use of interactive skills to eventually reach these socially important outcomes.

Types of Social Skills Deficits

Social skills deficits fall into one of three categories: acquisition deficits, performance deficits, and fluency deficits. Depending on the type of deficits, trainers provide explicit instruction in the use of these skills with modeling, reinforcement, or extra practice opportunities. Children with acquisition deficits do not have a prior understanding of the skill and need instruction before they can attempt to perform it. Children with performance deficits understand the skill they are trying to use but do not perform well in certain circumstances or lack the motivation to use the skill. In contrast, children with fluency deficits understand the skill and are motivated to use it but perform in a clumsy or unskilled manner due to a lack of practice opportunities or adequate models (Gresham, 2002).

Internalizing and externalizing disorders, although not directly related to a social skills deficit may also prevent social competence (Gresham, 2002). Children with internalizing disorders cope with challenging situations by directing their frustrations at themselves. This results in fear, anxiety, depression, low self-confidence, or social withdrawal (Wicks-Nelson &

Israel, 2009), potentially leading to continued or increased social rejection. Furthermore, children who are isolated and excluded from peer groups are at risk for developing more serious psychological illnesses in the future (Newcomb et al., 1993). To help these children succeed socially, clinicians should focus first on ameliorating these internalizing symptoms. If a social skills deficit develops due to lack of social interaction, social skills training should include opportunities to practice specific social tasks.

Children with externalizing disorders behave or express themselves in ways that cause disruption and interpersonal conflict (Wicks-Nelson & Israel, 2009). More specifically, these children may express their frustrations through aggression, non-compliance, or other anti-social behaviors that cause discord between themselves and others. Aggressive children may be able to maintain healthy peer relationships by displaying other positive social traits, but those who do not are at risk for social rejection (Newcomb et al., 1993). Children who socialize with deviant peer groups may receive more reinforcement for antisocial behaviors than positive social behaviors (Gresham, Van, & Cook, 2006). To be successful socially, children with externalizing disorders must replace anti-social behavior with positive social skills so they can be successful in a healthier peer group. Children who face these challenges need instruction and practice to develop new social strategies and use them competently.

Influences on Social Skills Development

Attachment and social skills development. Attachment refers to the bond that forms between infants and their parents in the earliest stages of life (Burkhardt-Mramor, 1996). According to Erik Erikson (1963), children learn to trust their primary caregivers to take care of their basic needs in their first year of life. Typically-developing children whose basic needs are consistently met develop a secure attachment with their primary caregivers. Secure attachment

forms a solid foundation for healthy physical, intellectual, social, and psychological development (Fahlberg, 1991). Children who experience trauma in the form of abuse or neglect, multiple changes in primary caregivers, or hospitalization in the first year of life have more difficulty forming a secure attachment and may not develop properly (Burkhardt-Mramor, 1996). By age two, children develop a basic orientation of trust or mistrust towards others. This orientation is likely to remain the same throughout childhood and adulthood (Erikson, 1963).

When children fail to develop the ability to trust others, they begin to display characteristics of attachment disorder such as stealing; habitual lying; destructive behavior; poor eye contact; poor self-control; unusual eating patterns; cruelty to animals; and preoccupation with fire, blood, and gore (Burkhardt-Mramor, 1996). Without secure attachment to a caregiver, children are less likely to feel remorse when engaging in socially unacceptable behavior. This is because they fail to internalize their parent's values or the values of society (Burkhardt-Mramor, 1996). By first grade, insecurely attached boys have difficulty establishing positive relationships with teachers and peers. Peers consider insecurely attached boys more aggressive than other classmates. Teachers observe more problem behaviors and rate insecurely attached boys lower on measures of social competence. Insecurely attached first-grade girls face similar challenges when they come from higher risk backgrounds (Cohn, 1990). For teenagers ages 12-18, healthy parental attachment is predictive of emotional adjustment. Poorly attached teens ages 15-18 face difficulties in establishing and maintaining healthy friendships and romantic relationships (Engels, Finkenauer, Meeus, & Dekovic, 2001) and are more likely to engage in delinquent behavior (Allen et al., 2002).

Parental influence on emotional development. Primary caregivers heavily influence emotional development during childhood. Children learn how to label and express emotions (Lewis & Michalsen, 1983), use coping skills, and respond emotionally to various situations from their parents' examples (Hesse & Cichetti, 1982). Children talk about feelings as a way to help them manage emotions and communicate well with others. Children of parents who discourage self-expression often have more difficulty managing their emotions later in life. These children may have a harder time coping with stressful events if they are unable to express their feelings (Behrens, 1988) and may be at risk for developing mental health problems (Lewis & Michalson, 1983).

Influence of teachers and school on development. Students who are engaged psychologically and behaviorally in their classroom settings are more likely to be successful academically (Dotterer & Lowe, 2011) and graduate from high school (Fredricks, Blumenfeld, & Paris, 2004). Students who do not have a history of academic challenges display more on-task behavior, pay attention more (behavioral engagement), feel a greater sense of belonging, and put more effort into their schoolwork (psychological engagement) in classrooms with high instructional quality, a positive social/emotional climate, and low student–teacher conflict. Low-achieving students display the same characteristics of behavioral engagement in these environments; however, they are less psychologically engaged than other students (Dotterer & Lowe, 2011). This may be due in part to the instructional approach (e.g., low-achieving students may withdraw from classroom activities if they are publicly compared to high-achievers) (Kelly & Turner, 2009). At-risk children who have positive relationships with their teachers display fewer behavior problems and greater social competence than at-risk children who do not have a positive relationship with their teacher (Pianta et al., 1995). As with healthy parent-child

relationships, children who feel supported and connected with teachers and peers are more likely to corroborate their teachers' goals and values and remain actively engaged in their schoolwork (Connell, 1990).

Function of maladaptive behaviors. When children lack effective social skills, they often develop functionally equivalent problem behaviors in an effort to adapt to their environment (Kevan, 2003). These behaviors often endure because they provide children with an easier means of getting what they want than less reliable pro-social skills (Gresham et al., 2001). In contrast, resilient children possess personality traits that enable them to adapt more easily to stressful situations. These children are more likely to develop positive social skills and tend to be more popular with peers and adults (Spinrad et al., 2006).

Negative Outcomes in Adolescence and Adulthood

Children who lack social skills often struggle to succeed academically in their youth and also in the workplace once they reach adulthood. Children who have difficulty developing positive relationships with peers have more difficulty adjusting to school and are more likely to be expelled, suspended, or drop out of school (Gresham & Elliot, 1993). When children reach adulthood, their success in the workplace relies heavily on healthy interpersonal relationships and good communication. Early peer relationship difficulties appear to be a causal factor for low levels of achievement in school and unemployment later in life, even after controlling for socioeconomic factors and intelligence (Woodward & Fergusson, 2000). Studies identify poor social skills as a key reason for job termination for adults with intellectual disabilities (Huang & Cuvo, 1997) and autism (Schopler & Mesibov, 1983). Social skills training early in life may help prevent these negative outcomes in many cases.

Other negative outcomes include the development of violent behavior patterns, involvement in illegal activities, and mental health challenges. Children who struggle socially are more likely to behave aggressively towards others and engage in criminal activity (Caldarella & Merrell, 1997). Teens who experience interpersonal conflict and do not feel a sense of connection with their school are more likely to abuse drugs and alcohol and be diagnosed with a mental illness (Bond et al., 2007).

Impact On Society

Individuals who interact with children with social skills deficits are more likely to experience negative outcomes as well. Disruptive behaviors interfere with teaching and learning in classroom settings. Teachers have difficulty managing disrespectful and anti-social behavior and struggle with emotional exhaustion, depersonalization, and negative feelings about their own personal accomplishments as teachers (Hastings & Bham, 2003). Teachers and peers of students with social skills deficits are more likely to be targets of violent outbursts, and the general public identifies violence and gang activity as one of the top problems in public schools (Elam, Rose, & Gallup, 1994). Effective treatment for children with social skills deficits will have a positive impact on the safety of teachers and students and support an environment conducive to learning.

Society must also pay the substantial financial cost of support services such as child welfare, special education, mental health services, and juvenile justice services. Families, schools, and taxpayers pay up to \$14,000 per year in the United States for services for one adolescent with a conduct disorder (Foster, Jones, & the Conduct Problems Prevention Research Group, 2005). Many children with social skills deficits continue to receive services as adults, resulting in further financial costs for society (Payton et al., 2008). Developmental prevention programs help minimize criminal and anti-social behavior. Researchers must continue to explore

the monetary costs and benefits of such programs, but it is clear that the financial benefits of some of these prevention programs outweigh the costs (Farrington & Welsh, 2002). Since taxpayers are already spending large amounts of money on services for youth with social skills deficits, prevention programs serve as a better investment if they reduce the need for services as children age (Foster et al., 2005).

Assessment Procedures

According to Gresham (2002), social skills assessment contains five main components: “(a) screening/selection, (b) classification of social skills deficits, (c) target behavior selection, (d) functional assessment, and (e) evaluation of intervention outcomes” (p. 246-247). During this process, social skills trainers gather information through direct or indirect methods. Direct methods include naturalistic observation and self-monitoring of behaviors as they occur in their natural environment. Indirect methods refer to interviews and adult or peer-ratings that trainers obtain without observing a natural occurrence of the behavior (Gresham, 2002). Trainers should gather information from multiple sources—e.g., parents, teachers, and peers—during the assessment phase since the child must develop skills to succeed in multiple social groups (Ruffalo & Elliott, 1997).

Social Skills Training (SST) Interventions

One approach to helping children improve their social skills is social skills training (SST). Researchers classify SST interventions into two categories, universal interventions and selected interventions. Trainers provide universal interventions to prevent the development of maladaptive social behaviors for all children in a given setting, such as an entire school, regardless of whether children are at-risk or not. Selected interventions aim to reverse or prevent further development of specific anti-social behaviors. Children receiving selected interventions

require more intense intervention over a longer period of time in order to experience the benefits of participation (Bullis, Walker, & Sprague, 2001).

According to Gresham (2002), “Social skills instruction should emphasize the acquisition, performance, generalization, and maintenance of prosocial behaviors and the reduction or elimination of competing problem behaviors” (p. 250). SST can be informal or formal. Informal social skills training takes place when a difficult situation presents itself in a natural setting. Adults can use these situations as a teaching opportunity to provide children with corrective feedback on their behavior. Formal interventions involve the use of a specific social skills curriculum with either the whole class or targeted individuals (Gresham, 2002).

Social skills deficits are not always clear-cut. Trainers must design interventions with each individual’s specific needs in mind. A child may display a combination of acquisition, performance, and/or fluency deficits as well as other behaviors that interfere with social skills development (Gresham, 2002). Table 1 lists the social skills objectives and strategies that address each of these needs.

Table 1

Social Skills Training Objectives and Strategies

- I. Promoting Skill Acquisition
 - A. Modeling
 - B. Coaching
 - C. Behavioral Rehearsal
 - II. Enhancing Skill Performance
 - A. Manipulation of antecedents
 - 1. Peer initiation strategies
 - 2. Proactive classroom management strategies
 - 3. Peer tutoring
 - 4. Incidental teaching
 - B. Manipulation of consequences
 - 1. Contingency contracting
 - 2. Group-oriented contingency systems
 - 3. School-home-notes
 - 4. Verbal praise
 - 5. Activity reinforcers
 - 6. Token/point systems
 - III. Removing Competing Problem Behaviors
 - A. Differential reinforcement
 - 1. Differential reinforcement of other behavior (DRO)
 - 2. Differential reinforcement of low rates of behavior (DRL)
 - 3. Differential reinforcement of incompatible behaviors (DRI)
 - B. Overcorrection
 - 1. Restitution
 - 2. Positive practice
 - C. Time-out
 - 1. Nonexclusionary (contingent observation)
 - 2. Exclusionary
 - D. Systematic desensitization (for anxiety-based competing behaviors)
 - E. Flooding/exposure (for anxiety-based competing behaviors)
 - IV. Facilitating Generalization and Maintenance
 - A. Topographical generalization
 - 1. Training diversely
 - 2. Exploiting functional contingencies
 - 3. Incorporating functional mediators
 - B. Functional generalization
 - 1. Identify strong competing stimuli in specific situations
 - 2. Identify strong competing problem behaviors in specific situations
 - 3. Identify functionally equivalent socially skilled behaviors
 - 4. Increase reliability and efficiency of socially skilled behaviors (build fluency)
 - 5. Decrease reliability and efficiency of competing problem behaviors
-

Source: Box 15.3 in Gresham, 2002, p. 252

For children with acquisition deficits, trainers use modeling, coaching, and behavioral rehearsal to help children acquire new social skills (Gresham, 2002). Modeling is a teaching technique in which the instructor provides an example of appropriate social behavior either through live performance or audio and video examples. When children perform behaviors correctly, verbal praise helps reinforce and maintain the behavior. Coaching uses verbal instructions followed by rehearsal of the target behavior and feedback (Elliot & Gresham, 1991). In behavioral rehearsals, role-play provides children opportunities to practice newly learned behaviors in a safe environment where they do not have to worry about negative reactions from others if they perform incorrectly. Trainers can take one of three approaches to behavioral rehearsal: covert, verbal, or overt. Covert rehearsals involve the mental visualization of certain social situations and possible responses. Verbal rehearsals require students to state how they would respond in a specific situation. Overt rehearsal involves live role-playing between group members to practice possible social responses for specific situations (Gresham, 2002).

Most children with social skills deficits face challenges with performance rather than acquisition (Gresham, 2002). To help children improve their performance, SST should occur in the most natural environment possible, e.g., the same environment where children will perform the skill after treatment ends. The manipulation of the antecedents and consequences of target social behaviors can help improve performance. Nonverbal and verbal cueing or prompting can provide children with the proper antecedent for the correct behavior. Some children need an additional cue at first because they have difficulty identifying cues in their natural environment. Trainers use reinforcement-based strategies, behavioral contracts, and school-home notes as consequences to shape social behavior. For children with performance deficits, trainers provide extra reinforcement in the form of attention, praise, token economies, and participation in

favorite activities to increase the frequency of appropriate social behavior. Differential reinforcement extinguishes anti-social behaviors that interfere with social skills performance and increases the presence of pro-social behaviors (See Table 1). Trainers provide reinforcement when any pro-social behavior occurs after the target problem has not been displayed for a specified period of time, problem behaviors reduce in frequency, or when children engage in pro-social behaviors that are incompatible with the targeted anti-social behavior (Gresham, 2002).

If SST is effective, children will transfer and maintain pro-social behavior in settings and situations outside of the training context. The more similar the training setting is to participants' natural environment, the more likely the behavior is to transfer to the natural setting. Another important measure of generalization is whether or not children perform behaviors that function similarly to the target behavior when encountering similar stimuli. A good example of generalization is when children display behaviors they have not been trained to perform that are similar to the trained behavior in a target situation. To maintain these behaviors over a long period of time, the new behaviors need to produce positive responses more efficiently and reliably than competing problem behaviors. Trainers can extinguish competing problem behaviors by decreasing reinforcement for these behaviors. For children with competing problem behaviors, it is also important to reinforce pro-social behavior while reducing problem behaviors in order to facilitate generalization and maintenance (Gresham, 2002).

Effectiveness of SST

SST research reveals mixed results. For high school students with emotional and behavioral disorders (EBD), social skills training appears to be an effective way to reach outcomes (Cook et al., 2008). Results for children and adolescents with autism spectrum disorders (ASD) are more mixed (Bellini et al., 2007).

In mega-analytic review involving 77 studies, Cook et al. (2008) found SST to be an effective intervention for adolescents with EBD. Two-thirds of adolescents improved after participating in SST programs compared to only one-third of control group participants. These positive outcomes were consistent across samples representing a variety of emotional and behavioral disorders. Some of the studies in the review indicated SST has been more effective for adolescents and pre-schoolers than elementary school students. This may be due to training methods that were developmentally inappropriate for elementary students. Elementary age students who were referred to researchers for SST training may have also displayed more serious behavior problems than those who did not experience social difficulties until they reached adolescence (Cook et al., 2008). Preschoolers and adolescents may have also had more motivation to develop strong social skills and may have been more responsive to certain training techniques such as modeling and coaching due their stage of development, whereas the elementary students may have been more responsive to operant conditioning (Schneider & Byrne, 1985). Further research will help determine the most effective SST methods for elementary age students with EBD.

Bellini et al. (2007) conducted a meta-analysis of 55 social skills training studies conducted between 1986 and 2005 with children and adolescents with ASD. The results indicated that these interventions were either ineffective or produced questionable treatment effects. The ability to generalize newly learned social skills to other settings was also low or questionable; however, some studies reported that a moderate number of children were able to maintain some improvements (Bellini et al., 2007).

Gresham et al. (2001) noted that 30 hours of SST over the course of 10 to 12 weeks may not be enough to produce substantial changes in social functioning. Since the studies reviewed

by Bellini et al. (2007) provided less than 30 hours of instruction, this may have accounted for the ineffectiveness of the treatments and lack of generalization. Increased frequency and intensity of SST sessions and repeated reinforcement of newly developed social skills may have resulted in greater benefits for students with ASD (Bellini et al., 2007). The intervention setting appeared to influence the effectiveness of the interventions as well. In the previously discussed studies, generalization and maintenance of treatment effects increased when SST took place in the child's normal classroom. Interventions that took place in pullout groups or other unnatural settings were less effective. These results were consistent with Gresham's recommendation that training occur in the most naturalistic setting possible (2002).

In the Bellini et al. review (2007), many studies also failed to identify the type of social skills deficit. In order to reach better outcomes, the type of deficit should have been identified and matched with the appropriate intervention. The intervention strategy should have then been implemented as intended in order to determine its effectiveness. Since only 14 out of the 55 studies identified whether or not interventions were implemented as planned, it is difficult to determine whether poor outcomes were the result of inadequate interventions or poor implementation. Furthermore, only twelve studies collected social validity data, which can effect implementation. Important stakeholders such as parents and teachers may have been more likely to support an SST program if they had the opportunity to share their opinion about the program's effectiveness (Bellini, et al., 2007).

Music and Social Skills Training

There are many advantages to conducting social skills training in a musical environment. Musical environments can motivate participation because children are innately attracted to music and musical instruments (Behrens, 1988). Music can increase group cohesion, provide students

with an opportunity to relate to their peers on a new level, and assist with the establishment of a group identity. Music offers a nonverbal means of connecting with peers that can be invaluable to children who may experience isolation in other environments. Music can also make it easier for children to relate to an adult trainer when the music is representative of their own peer culture (Friedlander, 1994).

Group leaders can adapt music techniques to meet varying ability levels, thus creating a non-threatening environment for group discussions and activities (Behrens, 1988). For example, having children perform a simple rap or chant as a group is less threatening than performing solo because they are all supporting one another by rapping the same part. Children who want to take on a leadership role may naturally express interest in a more challenging solo part during this process (Gardstrom, 1987). Songs or chants addressing a certain topic can also warm children up to the idea of verbally discussing that topic (Behrens, 1988). Lyrics that illustrate drug use, for example, can be used to facilitate a discussion about what to do if someone offers you drugs (Gardstrom, 1987).

The ability to adapt modes of participation allows each group member to make a valued contribution to a group project regardless of ability (Friedlander, 1994). Tasks can also be designed so that everyone in the group can easily complete the same task. This gives each group member a chance to demonstrate the same level of competence in completing the task. Furthermore, successful completion of a musical task can simultaneously foster the development of self-esteem while group members are learning and practicing social skills (Gardstrom, 1987).

As children begin to work together and communicate in a musical environment, behavior patterns emerge that reflect the way interactions take place in nonmusical environments (Friedlander, 1994). Giving group members a chance to provide feedback after musical

experiences is particularly useful when working with adolescents who tend to value peer feedback more than feedback from adults (Gardstrom, 1987). Peer feedback gives children a new perspective on their own interpersonal skills, which may confirm previous feedback from others or reveal new strengths and needs.

The musical environment presents new challenges that help children develop problem-solving skills. Children must learn to share instruments (Friedlander, 1994). They must learn to trust and rely on each person to play their part in order to reach the common goal of a successful musical experience. They also learn to identify the strengths and weaknesses of each group member (Friedlander, 1994). Gardstrom (1987) identifies several benefits of participating in music ensembles and private lessons. Ensemble experiences require students to take responsibility for their role in the group. Individual members internalize the rules of the ensemble such as showing up on time, taking responsibility for learning their part, and having a good attitude. Group members also learn to respect the property of others as they realize the value of the instruments and other music equipment. Positive reinforcement can be given to increase the frequency of these new pro-social behaviors. Community performances can also give participants an opportunity to work through performance anxiety in a healthy way. These performances can help children who have a history of engaging in anti-social behavior view other people in their community in a more positive light as well as help community members see more value in the children. Students may also improve their status in their peer group through participation in these kinds of activities (Gardstrom, 1987).

Taking on the challenge of learning a musical instrument in private lessons also gives children an opportunity to gain problem-solving skills. In order to continuously expand instrumental skills, students must develop a healthy attitude towards challenging tasks and figure

out how to overcome obstacles to continue improving. Students who take private lessons with a music therapist also develop valuable relationship skills that they can then apply in their interactions with parents and teachers. Participation in music ensembles and private lessons also helps students learn to set and achieve goals and track their own progress (Gardstrom, 1987). Musical experiences can serve as the initial motivation for developing the skills necessary for success in classroom and work environments, allowing for transfer to other settings in the future.

Behrens (1988) identifies several ways that music can be used to help children learn to manage their emotions and develop empathy. Music can provide a concrete context for the discussion of abstract concepts (e.g., children can play “angry” music on the drums during a discussion about feelings). Song lyrics can serve as a mnemonic device to help children memorize feeling words. Body language associated with various feelings can be incorporated into action songs. Children can use songwriting as a method of behavioral rehearsal to practice identifying appropriate responses to various social situations (Behrens, 1988).

Music Therapy Studies Addressing Social Skills

Even during the earliest years of life, music can be used to achieve social responses and enhance social interaction. Walworth (2009) found that both premature and full-term infants who participated in music groups with their parents engaged in more social behaviors and fewer alone behaviors than developmentally matched infants in a non-music control group. The results also indicated that parents in the music group engaged in more positive interactions with their infants than parents in the control group, although this result was not significant (Walworth, 2009).

Several studies have examined the possibilities of using music to increase social interactions between children with developmental disabilities and typically developing children.

Gunsberg (1988) used Improvised Musical Play to promote interaction between preschoolers with developmental disabilities and their typically developing peers. Improvised lyrics and musical instructions facilitated increased attention, consistent exchange of ideas between children of varying ability levels, and sustained interactive play three times longer than previous research using non-music play interventions. Humpal (1991) found similar results when using group music activities to facilitate interaction between typically developing preschool children and children with disabilities who attended an early childhood program. Staff ratings at pretest and posttest indicated increased interaction between the two groups of children. These initial findings support the notion that music can be used to increase social interaction among peers.

When working with children with autism, educators and therapists often use social stories to teach social skills. The incorporation of music into these social stories may increase the effectiveness of the intervention in some cases. When used in a social story, sung lyrics function as a carrier of information describing an appropriate behavior for a specific social situation (Pasiali, 2004). Several case studies indicate musical social stories are as effective or more effective than non-music social stories at reducing echolalia, improving ability to follow directions, and decreasing the use of an inappropriate speaking volume (Brownell, 2002). Music-based social stories can also be an effective means of significantly reducing inappropriate vocalizations (Pasiali, 2004). Although music-based social stories may not be indicated for every individual (Brownell, 2002), these data show that music has the potential to be an effective means of teaching social skills to students with autism.

Self-management is crucial in social settings. Music can be used to facilitate emotional development, a key component of self-management, and modify behavior. In one study, a child with autism and ADHD engaged in appropriate walking and car-riding behaviors more

frequently with the assistance of contingent music. Eventually the child no longer needed the music and his new skills allowed him to participate in various social activities that allowed him to develop more advanced social skills (Reid et al., 1975). In another study, songs were used to help children memorize feelings words and instruments were used to express and identify feeling states. The researchers also noticed that music reduced anxiety, influenced affective states, and helped children experience more positive emotions (Hong, Hussey, & Heng, 1998), which could have set the stage for more positive social experiences when interacting with others.

Music can be paired with family therapy techniques in order to enhance relationships between parents, children, and siblings. Music interventions such as “conducting, guiding [children], echoing, soloing, playing duets, and playing of mood themes” (p. 56) can be used to improve self-expression, improve communication between family members, and help families understand and work on power imbalances between family members (Miller, 1994). Music provides an opportunity for families to interact in mutually responsive ways. Songwriting and lyric analysis can support the expression of intimate thoughts and feelings and help create a positive and affectionate environment (Pasiali, 2012).

Studies have shown that participation in group or individual music experiences can influence participants’ social status among their peers. There is evidence that participation in a valued group task, such as group guitar lessons, can positively influence peer acceptance and group cohesion (Cassity, 1976). Individuals who display a valued skill, such as musical talent, may experience significant gains in status among their peers (Cassity, 1981). Children who regularly receive individual music therapy services may gain status among peers who consider this to be a preferred activity (Werbner, 1968).

Evidence indicates that music therapy can help children with attachment disorder increase their ability to engage in positive reciprocal interactions with others (Burkhardt-Mramor, 1996). Music caters to nonverbal interactions; therefore, interactions can take place, choices can be made, and relationships can be built without the pressure of verbal communication. In addition, music therapy can serve as a bridge to increased success in talk therapy. Once children feel comfortable transitioning into increased verbal interactions with the music therapist, they can then transfer their newly developed ability to relate to adults to a talk therapy environment (Burkhardt-Mramor, 1996).

Musical experiences provide a structure that promotes interpersonal interaction and encourages the development of positive relationships with peers. Research with young offenders and adolescents with emotional impairments shows that group music-making tasks such as songwriting require cooperation and compromise (Edgerton, 1990; Rio & Tenney, 2002). Duets played on piano might help children develop cooperation skills that allow them to participate in a larger group later on (Folsom, 1968). Discussion of songs chosen by the clients that address topics that are important to them can make clients feel more comfortable discussing their issues in the group setting. This facilitates the development of trust within the group and increases group cohesion. The bonds formed during these music experiences may be particularly important to adolescents who have had difficulty establishing bonds with others in their past (Rio & Tenney, 2002).

Several researchers have described the use of music as a means of self-expression that enabled participants to get along more easily with others and better manage their feelings. Edgerton (1990) described several music interventions that encouraged self-expression among participants in his study. These interventions included lyric writing, theme and style selection

for songs, and music composition. Analysis of the musical product during various phases of the creative process also provided clients with an opportunity to problem-solve. Rio and Tenney (2002) found similar anecdotal evidence supporting the use of instrument playing, singing, and rap writing to encourage self-expression with young offenders. In this case, instrument playing provided a nonverbal means of self-expression that may have been more easily accessible to clients who were not ready to verbally share their feelings with the therapist or group (Rio & Tenney, 2002).

Several researchers have observed improvements in subjects' self-esteem as a result of participating in music therapy. Youth who had difficulty forming positive relationships found singing and instrument playing provided an opportunity to receive positive praise from peers and adults (Rio & Tenney, 2002; Folsom, 1968). This was particularly important for talented musicians who engaged in anti-social behavior. Folsom described the case of a gifted singer who used her ability as an opportunity to manipulate and control others who participated in a hospital music program. The therapist chose to take control of choir rehearsals and use participation as a motivator to improve the girl's pro-social behavior. In this way, the girl was able to receive more appropriate praise since her singing ability was now being showcased in a pro-social context (Folsom, 1968). For youth with less musical experience, research has shown that music interventions such as songwriting can be structured to allow participants of all ability levels to experience success, providing them with yet another opportunity to improve their self-esteem (Edgerton, 1990).

Eidson (1989) found that adolescents with emotional disorders who took part in an experimental music therapy intervention showed improvement in measures of cooperation, on-task behavior, and respect for others. Additionally, off-task and disrespectful behaviors

decreased when compared to participants who received general music therapy and a no contact control group. In the experimental music therapy group, specific behaviors were targeted and reinforced with a token economy. The teens were able to use play money to purchase roles in a music video at the conclusion of the study. The experimental group participants also received transfer training, making them more likely to transfer their newly learned skills to the classroom than those in the general music therapy group, who did not take part in transfer training (Eidson, 1989).

Several authors have used music to help clients improve assertiveness and anger management skills. Slotoroff (1994) designed a drumming technique to help adolescent and adult survivors of trauma develop assertiveness and anger management skills. According to Slotoroff, this technique helped clients gain awareness of their interpersonal behaviors in a supportive environment. Music sessions planted “seeds of awareness” that could be further explored in more traditional talk therapy sessions (Slotoroff, 1994, p. 115). Similarly, Folsom (1968) described the case of a boy for whom participation in a band served as a good motivator to decrease disruptive and aggressive behaviors and display more appropriate behaviors.

Music experiences have also been used to help children cope with intense feelings. Rio and Tenney (2002) used music paired with relaxation techniques to assist an adolescent boy in coping with anger. The client stated that he felt more relaxed when using the techniques while listening to his own preferred music, rap music, than the relaxing piano music chosen by the therapist. The client continued to struggle with anger management towards the end of treatment, but stated that he would continue to use the relaxation and song-writing techniques that he learned during treatment as coping mechanisms (Rio & Tenney, 2002).

The efficacy of music-based interventions as a means of developing problem-solving skills, empathy, and cooperative behaviors has been explored. Staum (1993) compared the effectiveness of music versus non-music interventions in helping homeless children develop problem-solving skills. The researcher did not observe any significant changes in problem-solving skills in either group. This study was complicated by inconsistency in attendance and other factors such as inadequate space. The researcher noted increased engagement during music activities, though this apparently did not translate to improved problem-solving ability (Staum, 1993). Staum and Brotons (1995) also explored the effectiveness of using music as a reinforcer when teaching children social skills of cooperation and empathy. The participants did not meet the competencies for empathy or cooperation, possibly due to inconsistency in attendance (music therapy was not viewed as a priority by families) or because therapy may not have been viewed as reinforcing by the families who participated in the study. This lack of familial support could have resulted from the cultural belief that it is not acceptable to ask for help from others (Staum & Brotons, 1995).

Rickson and Watkins (2003) conducted a pilot study to determine the effect of a music therapy program on several dimensions of social behavior among aggressive adolescent boys. Over the course of several sessions, the music interventions became less structured and the boys were gradually given more responsibility and freedom to explore various avenues of creative self-expression. Teachers and residential care workers observed decreases in disruptive behavior, antisocial behavior, self-absorption, communication disturbance, and anxiety. Less-structured creative opportunities appeared to foster the development of empathy and positive peer relationships, and rhythmic exercises appeared to improve impulse control for boys without ADHD. However, researchers observed an increase in disruptive behavior among students with

ADHD, which may have been due to excessive stimulation in the less structured music therapy environment (Rickson & Watkins, 2003). Finding an appropriate amount of structure will be an important consideration for future research regarding the effectiveness of music-based SST for participants with ADHD.

Gooding (2011) conducted three experiments with at-risk youth to assess the impact of music therapy interventions on peer relations and self-management. Cognitive behavioral strategies such as modeling, role-playing, behavioral rehearsal, and reinforcement were used in combination with music-based social skills activities. Participants in the three experiments included adolescents with learning disabilities, ADHD, and/or Asperger's Syndrome; individuals in a residential treatment facility for youth with emotional, behavior, and psychological disorders; and children with common social skills deficits as well as typically developing children in an after-school care program. Participants' self-ratings, adult ratings, and behavioral observations indicated significant improvements in social competence although only behavioral observations were consistently significant in all three experiments (Gooding, 2011).

Summary and Restatement of Purpose

Children who increase their social competence and decrease the presence of anti-social behavior are more likely to succeed in many facets of life. Music therapy may be an effective means of training children who need to develop better social skills. The purpose of this study was to evaluate the effectiveness of a music therapy-based social skills training program compared to an athletics-based social skills training program for children with social skills deficits and interfering behavior problems.

The following research questions were addressed:

1. Did adult ratings of participants' Social Competence and Antisocial Behavior differ for participants in a music-based social skills training group vs. an athletics-based group?
2. Did participants' self-ratings of Social Competence and Antisocial Behavior differ for participants in a music-based social skills training group vs. an athletics-based group?

CHAPTER 3

METHODOLOGY

Informed Consent and Recruitment

Prior to the study, approval was obtained from the Human Subjects Committee at a large Midwestern University. The children attended a school designed to maximize success for children with emotional and behavioral disorders, learning disabilities, intellectual disabilities, autism spectrum disorders, speech and language disorders, traumatic brain injury, and other challenges that interfered with their ability to function in public school environments. After consulting the school principal, it was determined that a convenience sample consisting of all the students in one classroom would be most feasible for this study. The classroom selected for this study was chosen based on the students' diagnoses, age (to make sure interventions and measures were age-appropriate), and history of social skills deficits and interfering behaviors. Participants' parents/guardians signed an informed consent form giving permission for their child to participate in this study. Verbal assent was also obtained from each child prior to participation in the study.

Participants

Participants included eight fifth and sixth graders age 10-11 (Basketball Group, $N = 4$; Music Group, $N = 4$) who had displayed social skills deficits or interfering behaviors in the school setting. Diagnoses included emotional disturbance, post-traumatic stress disorder (PTSD), attention deficit hyperactivity disorder (ADHD), bi-polar disorder, and oppositional defiant disorder (ODD). To be included in the study, the participants had to possess adequate motor skills to participate in the basketball or music activities and adequate verbal and cognitive abilities to participate in group discussions (in the English language) and circle self-assessment

scores on the pretest and posttest evaluation forms. Inclusion was open to children of both genders. The principal and homeroom teacher for the convenience sample classroom were consulted to make sure each student met the requirements for participation.

Setting

Sessions for the music-based social skills group took place in the music classroom at the school. The music classroom contained several instruments including a drum set, one free standing electric piano and several portable piano keyboards, hand drums and percussion instruments, several acoustic and electric guitars, an electric bass, a PA system, desk, two storage cabinets, and several plastic chairs arranged in a circle for the participants. Sessions for the athletics-based social skills group took place in the school gym. Materials used in the athletics-based social skills group included multiple child-sized basketballs and a basketball goal. Discussions took place while seated in a circle on the gym floor or in the bleachers.

Design

A two-group pretest posttest experimental design was utilized for this study. The music-based experimental group received five sessions of music therapy-based social skills training once a week over the course of five weeks. The athletics-based experimental group received five sessions of social skills training over the same time period using equivalent basketball-based activities. Participants were matched using the pretest scores on the School Social Behavior Scales (SSBS-2) completed by the teacher and para-educator and the Multisource Assessment of Social Competence Scale (MASCS) completed by the participants before being assigned to one of the two treatment groups. The researcher attempted to pair participants as closely as possible using these pretest scores without weighting any of the raters more heavily than the others.

School Social Behavior Scales (SSBS-2) (Adult ratings)

All eight participants were members of the same classroom. The homeroom teacher and para-educator that were assigned to this classroom served as the two adult raters in this study. The teacher and para-educator assessed each child's Social Competence and Antisocial Behavior by completing all items on the School Social Behavior Scales, Second Edition (SSBS-2) rating form (Merrell, 2002a) at pretest and posttest. The SSBS-2 consists of 64 items (e.g., "Cooperates with other students") for which teachers and other school personnel indicate responses on a 5-point Likert scale with three word anchors, i.e., 1 = Never, 3 = Sometimes, and 5 = Frequently. It is designed to assess both Social Competence and Antisocial Behavior for students in grades K-12. The Social Competence Scale contains 32 items that are divided into three subscales including the Peer Relations Subscale, Self-Management/Compliance Subscale, and Academic Behavior Subscale. The Antisocial Behavior Scale contains 32 items that are divided into three subscales including the Hostile/Irritable Subscale, Antisocial/Aggressive Subscale, and Defiant/Disruptive Subscale (Merrell, 2002b). Each rating form takes about three to five minutes to complete per student.

Reliability. Four types of reliability have been calculated for the SSBS-2: internal consistency reliability, standard error of measurement (SEM), test-retest reliability, and interrater reliability. Internal consistency reliability and SEM were calculated for the standardization sample and norming groups used in the development of the test. For internal consistency reliability, the Cronbach's coefficient alpha and the Spearman-Brown split-half coefficients of the Social Competence and Antisocial Behavior Scales ranged from .96 to .98 and coefficients for the six subscales ranged from .91 to .97 indicating highly strong internal consistency for all the scales. The SEM scores were small indicating a minimal amount of error (Merrell, 2002b).

Test-retest reliability of teachers' ratings was calculated during the development of the first version of the SSBS after a three-week time period. Coefficients ranged from .76 to .83 for the Social Competence Scale and .60 to .73 for the Antisocial Behavior Scale (Merrell, 2002b). For the SSBS-2, Schuster (1996) calculated test-retest reliability after a period of one week. Pearson product-moment correlation coefficients for the Social Competence Scale ranged from .86 to .94. All three dimensions of the Antisocial Behavior Scale reached a coefficient of .94. These studies indicate a high degree of consistency in scores over short periods of time (Merrell, 2002b).

Interrater reliability of multiple raters in the same setting indicated moderate to moderately high agreement. Bivariate Pearson product-moment correlations for the Social Competence Scale ranged from .72 to .86 revealing high agreement among raters. Coefficients for the Antisocial Behavior Scale ranged from .53-.71 indicating moderately high agreement among raters. This evidence supports the use of the SSBS-2 by multiple raters in the same setting (Merrell, 2002b).

Validity. Several studies have measured the content, construct, and criterion-related validity of the SSBS-2. Evidence has accumulated to confirm that the Social Competence and Antisocial Behavior scales as well as their subscales are indeed valid measures of social behavior in school settings (Merrell, 2002b).

Content validity was calculated based on data from the norming sample used in the development of the SSBS-2 to determine the relationship between scores for individual items and the total score for each scale. For the Social Competence Scale, the bivariate product-moment correlations between each item and the total score range from .62 to .82. Correlations between each item and its respective subscale total range from .78 to .90. For the Antisocial

Behavior Scale, correlations between each item and the total score range from .60 to .87, and correlations between each item and its respective subscale total range from .66 to .90. This evidence indicates the score for each item within a given scale is strongly related to the total score of each scale in the SSBS-2 (Merrell, 2002b).

Factor analyses confirmed that each of the subscales of the Social Competence Scale and the Antisocial Behavior Scale are good measures of those two main constructs. For the Social Competence Scale, the goodness of fit (GFI) = .93, and for the Antisocial Behavior Scale the GFI = .96 (Merrell, 2002b). Studies examining convergent and discriminant validity have identified very strong positive correlations between the Social Competence subscales and comparable measures of social skills such as the Walker-McConnell Scale of Social Competence and School Adjustment (Merrell, 1993; Walker & McConnell, 1995), the Teacher's Report Form, and the Child Behavior Checklist (Achenbach, 1991a; Achenbach, 1991b; Emerson, Crowley, & Merrell, 1994). Evidence also indicates positive correlations between the Antisocial Behavior Scale and comparable measures of externalizing behaviors such as the Waksman Social Skills Rating Scale and the Conners Teacher Rating Scales (Conners, 1990; Merrell, 1993; Waksman, 1985).

Two studies have examined the criterion-related validity of the SSBS-2. When comparing SSBS-2 ratings with sociometric status measures, Shuster (1996) found teacher ratings consistently predicted students' status as rejected or non-rejected and were particularly consistent with scores on the Peer Relations Subscale of the Social Competence Scale. During the initial development of the SSBS-2, concurrent criterion related validity was examined by comparing teachers' ratings on the SSBS-2 with direct observations. Direct behavioral observations were moderately correlated with the Social Competence scores while correlations

with Antisocial Behavior scores were weaker. While there was some overlap between direct behavioral observations and teachers' ratings, this evidence highlights the importance of using both types of measurement when conducting more in depth assessments of social skills since the two methods measure different constructs (Merrell, 2002b).

Multisource Assessment of Social Competence Scale (MASCS) (Self-Ratings)

For self-assessments, each participant completed the Multisource Assessment of Social Competence Scale (MASCS) at pretest and posttest. The MASCS is based on the first edition of the SSBS and was created to provide a tool short enough to be used by children (for self- and peer-assessments) as well as parents and teachers. The MASCS consists of fifteen items that represent the two primary dimensions of Social Competence (Cooperation Skills and Empathy) and Antisocial Behavior (Impulsivity, and Disruptiveness). Each item (e.g., "I offer to help other students") is rated on a 4-point scale where 1 = never, 2 = rarely, 3 = frequently, and 4 = very frequently (Junttila et al., 2006; Junttila et al., 2012). One item "I am skillful in starting conversations with mates" was changed to "I am skillful in starting conversations with other students" to make the item appropriate for American English. Magotsiou, Goudas, and Hasandra, (2006) found this approach reliable and valid when translating the MASCS into another language. It took the participants approximately ten minutes to fill out the self-assessments. The researcher read each question to the participants in a group setting and while the participants circled their responses for each item.

Reliability. Junttila et al. (2012) provided evidence for internal consistency reliability when using the MASCS for self-ratings with samples of fourth and seventh graders. For the fourth grade sample, Cronbach's Alpha coefficients for the four subdimensions were .80 (Cooperating Skills), .71 (Empathy), .84 (Impulsivity), and .84 (Disruptiveness). For the seventh

grade sample, the coefficients were .86 (Cooperating skills), .79 (Empathy), .85 (Impulsivity), and .83 (Disruptiveness). When calculating internal consistency for the two primary dimensions, coefficients for the fourth grade sample were .89 (Prosocial behavior) and .89 (Antisocial behavior). Coefficients for the seventh grade sample were .86 (Prosocial behavior) and .87 (Antisocial behavior).

Magotsiou, Goudas, and Hasandra (2006) calculated test-retest reliability of self-reports using a 23-item version of the MASCS translated into the Greek language. The sample consisted of sixth grade girls and boys age 11-12. High intraclass correlation coefficients (ICC) were found for the four subdimensions when students completed the second self-report after a twenty-day time period. The ICCs were .89 for Cooperative Skills, .90 for Empathy, .94 for Quick-temperedness, and .89 for Disruptiveness providing further evidence for the reliability of the MASCS when used as a self-assessment and prosocial and antisocial behavior.

Validity. In order to examine construct validity, confirmatory factor analyses were conducted with samples of fourth and seventh graders. Chi-square, the Comparative Fit Index (CFI), the Tucker-Lewis Index (TLI), the Root Mean Square Error of Approximation (RMSEA), and the Standardized Root Mean Square Residual (SRMR) were used to determine how well the scale measured the two-factor model of Prosocial and Antisocial behavior as well as the four-factor model of Cooperation Skills, Empathy, Impulsivity, and Disruptiveness. For the fourth grade sample, the results for the four-factor model were $\chi^2(df) = 135.85(84)$, CFI = .959, TLI = .949, RMSEA = .044, and SRMR = .047. For the two-factor model, $\chi^2(df) = 137.18(85)$, CFI = .959, TLI = .950, RMSEA = .044, and SRMR = .048. For the seventh grade sample, the results for the four-factor model were $\chi^2(df) = 130.49(84)$, CFI = .955, TLI = .944, RMSEA = .054, and SRMR = .043. For the two-factor model, $\chi^2 = 131.32(85)$, CFI = .955, TLI = .944,

RMSEA = .053, and SRMR = .043. This evidence confirmed the items on the MASCS are adequate measures of the higher order constructs of the two primary dimensions as well as the four subdimensions (Junttila et al., 2012).

Procedure

After gathering pretest scores, each participant was assigned to one of the two treatment interventions. Participants in the two groups were matched according to pretest scores on the self-assessment as well as teacher and para-educator ratings in order to make the two groups as equivalent as possible based on social competence and anti-social behavior patterns, see Table 2. Once the adult and student raters completed the pretest, each student received either five 30-minute music therapy social skills training sessions or five 30-minute athletics-based social skills training sessions once a week for a period of five weeks (See Appendix A for session plans). Each week, the skills learned in the previous sessions were reviewed and incorporated into the new lesson. After the completion of the fifth session, the adult and student raters completed the posttest rating forms. The researcher was a Board-Certified Music Therapist working towards the completion of a Master's of Music Education degree with an emphasis in Music Therapy and served as the music therapist at the research site for one year prior to conducting the study. Additional related clinical experience included one undergraduate practicum with adolescents in treatment for substance abuse, seven months of internship experience working with children and adolescents in an inpatient mental health unit, and supervision of undergraduate music therapy students working at the juvenile detention center and other residential and school settings for at risk youth.

Table 2

Basketball Group and Music Group Raw Scores

| | <i>Teacher Social Competence Total</i> | <i>Para- Educator Social Competence Total</i> | <i>Teacher Antisocial Behavior Total</i> | <i>Para- Educator Antisocial Behavior Total</i> | <i>Self Social Competence Total</i> | <i>Self Antisocial Behavior Total</i> |
|-------------------|--|---|--|---|---|---|
| <i>Basketball</i> | | | | | | |
| Participant 2 | 123 | 106 | 89 | 83 | 26 | 14 |
| Participant 5 | 64 | 104 | 127 | 103 | 22 | 11 |
| Participant 7 | 96 | 87 | 114 | 103 | 28 | 23 |
| Participant 6 | 64 | 98 | 128 | 116 | 23 | 19 |
| <i>Music</i> | | | | | | |
| Participant 3 | 94 | 114 | 122 | 80 | 22 | 13 |
| Participant 4 | 102 | 100 | 126 | 102 | 25 | 10 |
| Participant 1 | 102 | 97 | 117 | 103 | 28 | 28 |
| Participant 8 | 66 | 100 | 128 | 121 | 27 | 8 |

Note: “Higher Social Competence scores indicate greater levels of social adjustment. Higher Antisocial Behavior scores indicate greater levels of social behavior problems” (Merrell, 2002a, p. 4). Participants were matched as listed in Table 2 from top to bottom (e.g., Participant 2 was matched with Participant 3, Participant 5 with Participant 4, etc.). The total number possible for each measure are: Teacher/Para-educator Social Competence Total = 160; Teacher/Para-educator Antisocial Behavior Total = 160; Self Social Competence Total = 32; Self Antisocial Behavior Total = 28.

Treatment Interventions

Both treatment groups addressed the following four objectives:

Objective 1: The student will make transitions between classroom activities without wasting time or disrupting others.

Objective 2: The student will pay attention to and follow teachers’ instructions.

Objective 3: The student will receive criticism/feedback well.

Objective 4: Without prompting, the student will cooperate with others by listening, sharing ideas, making positive comments, helping others, and encouraging others.

Objective 1 was addressed at the beginning and end of each session. Students were given rules for transitioning before leaving their previous class and before leaving each session. Students were rewarded at the beginning and end of the first two sessions with opportunities to participate in music or basketball activities if they followed all of the rules for transitioning. After two sessions, the reward at the beginning of the session was removed, and participants were told they had to follow the rules for transitioning at both the beginning and end of the session to receive a reward. A new objective was introduced on each day and the previous objectives were reviewed. Day five served as a final review session for all four objectives. On each day, the researcher introduced the new objective, discussed why it was important, identified the skill steps necessary to reach the objective and had students repeat those steps, see Table 3 for the sequence of objectives. Positive and negative role-playing was used to illustrate the consequences of prosocial and antisocial behavior. Music and basketball activities were alternated with discussion components to give participants an opportunity to practice each skill. Intervention discussion components were adapted from Section Two of Elliot and Gresham's (1991) *Social Skills Intervention Guide: Practical Strategies for Social Skills Training*. The researcher facilitated all activities and discussions in both groups, see Figure 1 for a description of the daily procedure.

Table 3

Sequence of Objectives

| Day 1 | Day 2 | Day 3 | Day 4 | Day 5 |
|-------------|--|---|---|--------------------------|
| Objective 1 | Objective 2 (Review Objective 1) | Objective 3 (Review Objectives 1-2) | Objective 4 (Review Objectives 1-3) | Review Objectives 1-4 |

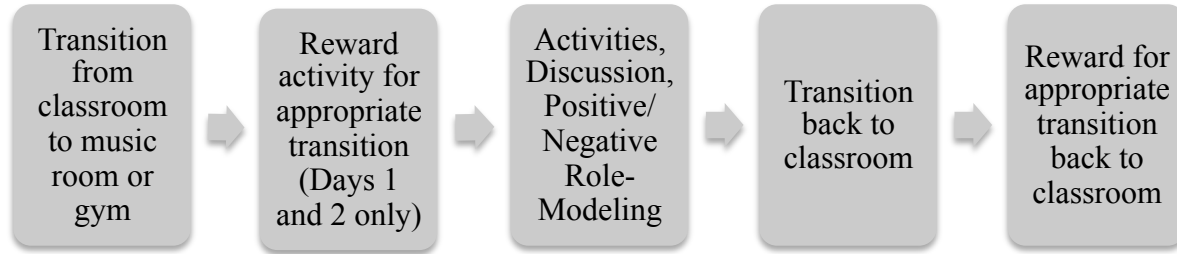


Figure 1: Daily Procedure

In the music therapy sessions, the participants practiced each skill during rock band and group drumming experiences. The researcher used improvisation and drum circle facilitation techniques to provide structure and support for each music experience. Each social skill was discussed and the participants had the opportunity to practice each skill in a musical context, e.g. practicing following directions during bucket drumming activities (see Appendix A for a detailed description of activities for each session). Musical rewards (e.g., opportunities to try a new instrument after returning to class) were provided for each participant after successful transitions.

In the athletics-based sessions, the participants practiced each skill in the context of basketball activities including practicing fundamentals (e.g., shooting and passing) and team scrimmages. The researcher served as referee and participated when necessary to provide structure and support for each basketball activity. Each skill was discussed and the participants had the opportunity to practice each skill in a basketball context (e.g., practicing following directions during various passing drills) (see Appendix A for a detailed description of activities for each session). A basketball-based reward (e.g., opportunities to take a shot at a miniature basketball goal after returning to class) was provided for each participant after successful transitions.

CHAPTER 4

RESULTS

Ratings of participants' Social Competence and Antisocial Behavior were collected from the teacher, para-educator, and students at pretest and posttest intervals to determine whether or not significant differences existed within and between the two groups. Pretest data was collected one week prior to participation in the study and posttest data was collected one week after completion of the group sessions. A mixed ANOVA was used to analyze the data to prevent the likelihood of Type 1 error using time as the within subjects factor and group assignment as the between subjects factor. The data was analyzed separately for teacher, para-educator, and self-ratings. Confidence intervals were set at a level of $p < .05$.

A total of eight students participated in the study (Basketball Group, $N = 4$; Music Group, $N = 4$). Although some students were unable to attend every session, data were included for all eight students when possible. Data for Participant 5 were removed from the analysis of para-educator ratings due to a missing posttest rating form. Data for Participant 4 were removed from the analysis of participants' self-ratings because the participant was suspended from school and was unable to complete a posttest self-rating form.

Research Question 1. Did adult ratings of participants' Social Competence and Antisocial Behavior differ for participants in a music-based social skills training group vs. an athletics-based group?

Teacher Ratings of Social Competence

For teacher ratings of the Social Competence Total as well as all three subscales, ratings for both groups improved from pretest to posttest, however, there were no significant differences between or within groups on this measure, see Tables 4 and 5.

Table 4

Impact of Social Skills Training on Teacher Ratings of Social Competence Constructs across Groups and Time (N = 8)

| Dependent Variable | <i>F</i> | <i>p</i> | Partial Eta |
|-------------------------------------|----------|----------|-------------|
| Peer Relations Subscale | | | |
| Within | 2.588 | .159 | .301 |
| Between | .034 | .859 | .006 |
| Interaction | .017 | .900 | .003 |
| Self-Management/Compliance Subscale | | | |
| Within | 3.678 | .104 | .380 |
| Between | .005 | .948 | .001 |
| Interaction | .589 | .472 | .089 |
| Academic Behavior Subscale | | | |
| Within | 2.043 | .203 | .254 |
| Between | .074 | .794 | .012 |
| Interaction | .000 | 1.000 | .000 |
| Social Competence Total | | | |
| Within | 2.827 | .144 | .320 |
| Between | .032 | .864 | .005 |
| Interaction | .092 | .772 | .015 |

Note. The time (within-subjects) factor was the duration between pre and post testing. The group (between-subjects) factor was whether the students were in the Basketball or Music groups. The Interaction terms represent the intersection of the between- and within-subject terms.

Table 5

Descriptive Statistics for Teacher Ratings of Social Competence (N = 8)

| Dependent Variable | Mean | Std. Deviation | N |
|--------------------------------------|--------|----------------|---|
| Peer Relations Subscale | | | |
| Basketball Group Pretest | 38.250 | 12.971 | 4 |
| Basketball Group Posttest | 43.250 | 7.890 | 4 |
| Music Group Pretest | 39.750 | 7.932 | 4 |
| Music Group Posttest | 44.000 | 8.165 | 4 |
| Pretest Total (Both Groups Combined) | 39.000 | 9.986 | 8 |
| Posttest Total Combined | 43.625 | 7.444 | 8 |
| Self-Management Compliance Subscale | | | |
| Basketball Group Pretest | 26.500 | 7.895 | 4 |
| Basketball Group Posttest | 31.750 | 5.560 | 4 |
| Music Group Pretest | 28.250 | 5.439 | 4 |
| Music Group Posttest | 30.500 | 3.873 | 4 |
| Pretest Total Combined | 27.375 | 6.346 | 8 |
| Posttest Total Combined | 31.125 | 4.486 | 8 |
| Academic Behavior Subscale | | | |
| Basketball Group Pretest | 22.000 | 7.659 | 4 |
| Basketball Group Posttest | 24.000 | 5.477 | 4 |
| Music Group Pretest | 23.000 | 4.243 | 4 |
| Music Group Posttest | 25.000 | 4.082 | 4 |
| Pretest Total Combined | 22.500 | 5.757 | 8 |
| Posttest Total Combined | 24.500 | 4.504 | 8 |
| Social Competence Total | | | |
| Basketball Group Pretest | 86.750 | 24.488 | 4 |
| Basketball Group Posttest | 99.000 | 18.886 | 4 |
| Music Group Pretest | 91.000 | 17.088 | 4 |
| Music Group Posttest | 99.500 | 15.780 | 4 |
| Pretest Total Combined | 88.875 | 21.866 | 8 |
| Posttest Total Combined | 99.250 | 16.113 | 8 |

Teacher Ratings of Antisocial Behavior

Teacher ratings of the Antisocial Behavior Scale Total decreased for the Music Group and increased for the Basketball Group, however, there were no significant differences between or within groups, see Tables 6 and 7.

Table 6

Impact of Social Skills Training on Teacher Ratings of Antisocial Behavior Constructs across Groups and Time (N = 8)

| Dependent Variable | <i>F</i> | <i>p</i> | Partial Eta |
|--------------------------------|----------|----------|-------------|
| Hostile/Irritable Subscale | | | |
| Within | .279 | .616 | .044 |
| Between | .023 | .886 | .004 |
| Interaction | .582 | .474 | .088 |
| Antisocial/Aggressive Subscale | | | |
| Within | 13.926 | .010 | .699 |
| Between | .743 | .422 | .110 |
| Interaction | 9.126 | .023 | .603 |
| Defiant/Disruptive Subscale | | | |
| Within | 4.568 | .076 | .432 |
| Between | .131 | .730 | .021 |
| Interaction | 6.081 | .049 | .503 |
| Antisocial Behavior Total | | | |
| Within | 3.549 | .109 | .372 |
| Between | .094 | .770 | .015 |
| Interaction | 3.887 | .096 | .393 |

Analysis of the Antisocial/Aggressive Subscale revealed significant differences between and within groups. Although ratings of antisocial and aggressive behavior decreased significantly for both groups, $p = .01$, the Music Group ratings decreased significantly more than the Basketball Group, $p = .023$, see Tables 6 and 7.

Although the teacher did not observe significant decreases in Defiant/Disruptive behavior when looking at both groups combined, the Music Group decreased significantly, $p = .049$, when compared to the Basketball Group. Ratings of Defiant/Disruptive behavior actually increased from pretest to posttest for the Basketball Group. Similarly, teacher ratings of the Hostile/Irritable Subscale increased for the Basketball Group and decreased for the Music Group, although the differences were not significant between or within groups, see Tables 6 and 7.

Table 7

Descriptive Statistics for Teacher Ratings of Antisocial Behavior (N = 8)

| Dependent Variable | Mean | Std. Deviation | N |
|--------------------------------|---------|----------------|---|
| Hostile/Irritable Subscale | | | |
| Basketball Group Pretest | 50.250 | 7.320 | 4 |
| Basketball Group Posttest | 50.750 | 7.365 | 4 |
| Music Group Pretest | 52.500 | 2.646 | 4 |
| Music Group Posttest | 49.750 | 7.762 | 4 |
| Pretest Total Combined | 51.375 | 5.236 | 8 |
| Posttest Total Combined | 50.250 | 7.025 | 8 |
| Antisocial/Aggressive Subscale | | | |
| Basketball Group Pretest | 35.500 | 6.608 | 4 |
| Basketball Group Posttest | 35.000 | 8.042 | 4 |
| Music Group Pretest | 41.000 | 2.944 | 4 |
| Music Group Posttest | 36.250 | 3.096 | 4 |
| Pretest Total Combined | 38.250 | 5.574 | 8 |
| Posttest Total Combined | 35.625 | 5.680 | 8 |
| Defiant/Disruptive Subscale | | | |
| Basketball Group Pretest | 28.750 | 4.272 | 4 |
| Basketball Group Posttest | 29.000 | 4.690 | 4 |
| Music Group Pretest | 29.750 | 1.708 | 4 |
| Music Group Posttest | 26.250 | 2.872 | 4 |
| Pretest Total Combined | 29.250 | 3.059 | 8 |
| Posttest Total Combined | 27.625 | 3.889 | 8 |
| Antisocial Behavior Total | | | |
| Basketball Group Pretest | 114.500 | 18.157 | 4 |
| Basketball Group Posttest | 114.750 | 19.990 | 4 |
| Music Group Pretest | 123.250 | 4.856 | 4 |
| Music Group Posttest | 112.250 | 12.121 | 4 |
| Pretest Total Combined | 118.875 | 13.163 | 8 |
| Posttest Total Combined | 113.500 | 15.362 | 8 |

Para-Educator Ratings of Social Competence

No significant differences were revealed between or within groups for Para-educator ratings of Social Competence. Para-educator ratings decreased for the Music Group and

increased for the Basketball Group for the Social Competence Total and all three subscales, see Tables 8 and 9.

Table 8

Impact of Social Skills Training on Para-Educator Ratings of Social Competence Constructs across Groups and Time (N = 7)

| Dependent Variable | <i>F</i> | <i>p</i> | Partial Eta |
|-------------------------------------|----------|----------|-------------|
| Peer Relations Subscale | | | |
| Within | 1.039 | .355 | .172 |
| Between | .945 | .376 | .159 |
| Interaction | 1.340 | .299 | .211 |
| Self-Management/Compliance Subscale | | | |
| Within | 1.558 | .267 | .238 |
| Between | .014 | .910 | .003 |
| Interaction | 1.946 | .222 | .280 |
| Academic Behavior | | | |
| Within | 2.449 | .178 | .329 |
| Between | .047 | .838 | .009 |
| Interaction | 5.510 | .066 | .524 |
| Social Competence Total | | | |
| Within | 1.737 | .245 | .258 |
| Between | .200 | .674 | .038 |
| Interaction | 2.622 | .166 | .344 |

Table 9

Descriptive Statistics for Para-Educator Ratings of Social Competence (N = 7)

| Dependent Variable | Mean | Std. Deviation | N |
|-------------------------------------|---------|----------------|---|
| Peer Relations Subscale | | | |
| Basketball Group Pretest | 43.667 | 1.528 | 3 |
| Basketball Group Posttest | 44.000 | 3.464 | 3 |
| Music Group Pretest | 43.500 | 3.109 | 4 |
| Music Group Posttest | 38.250 | 8.180 | 4 |
| Pretest Total Combined | 43.571 | 2.370 | 7 |
| Posttest Total Combined | 40.714 | 6.849 | 7 |
| Self-Management/Compliance Subscale | | | |
| Basketball Group Pretest | 29.333 | 3.786 | 3 |
| Basketball Group Posttest | 29.667 | .577 | 3 |
| Music Group Pretest | 32.750 | 1.708 | 4 |
| Music Group Posttest | 26.750 | 6.500 | 4 |
| Pretest Total Combined | 31.286 | 3.094 | 7 |
| Posttest Total Combined | 28.000 | 4.865 | 7 |
| Academic Behavior Subscale | | | |
| Basketball Group Pretest | 24.000 | 4.583 | 3 |
| Basketball Group Posttest | 25.000 | 1.732 | 3 |
| Music Group Pretest | 26.500 | 3.109 | 4 |
| Music Group Posttest | 21.500 | 3.786 | 4 |
| Pretest Total Combined | 25.429 | 3.690 | 7 |
| Posttest Total Combined | 23.000 | 3.416 | 7 |
| Social Competence Total | | | |
| Basketball Group Pretest | 97.000 | 9.539 | 3 |
| Basketball Group Posttest | 98.667 | 4.619 | 3 |
| Music Group Pretest | 102.750 | 7.632 | 4 |
| Music Group Posttest | 86.500 | 18.339 | 4 |
| Pretest Total Combined | 100.286 | 8.301 | 7 |
| Posttest Total Combined | 91.714 | 14.750 | 7 |

Para-Educator Ratings of Antisocial Behavior

No significant differences were revealed between or within groups for para-educator ratings of Antisocial Behavior. Similar to the para-educator ratings of Social Competence,

ratings of Antisocial Behavior decreased for the Total and all three subscales for the Basketball Group and increased for the Music Group, see Tables 10 and 11.

Table 10

Impact of Social Skills Training on Para-Educator Ratings of Antisocial Behavior Constructs across Groups and Time (N = 7)

| Dependent Variable | <i>F</i> | <i>p</i> | Partial Eta |
|--------------------------------|----------|----------|-------------|
| Hostile/Irritable Subscale | | | |
| Within | .071 | .801 | .014 |
| Between | 2.175 | .200 | .303 |
| Interaction | .478 | .520 | .087 |
| Antisocial/Aggressive Subscale | | | |
| Within | .015 | .908 | .003 |
| Between | 1.059 | .351 | .175 |
| Interaction | .807 | .410 | .139 |
| Defiant/Disruptive Subscale | | | |
| Within | .521 | .503 | .094 |
| Between | .765 | .422 | .133 |
| Interaction | 2.838 | .153 | .362 |
| Antisocial Behavior Total | | | |
| Within | .099 | .766 | .019 |
| Between | 1.413 | .288 | .220 |
| Interaction | .951 | .374 | .160 |

Table 11

Descriptive Statistics for Para-Educator Ratings of Antisocial Behavior (N = 7)

| Dependent Variable | Mean | Std. Deviation | N |
|--------------------------------|---------|----------------|---|
| Hostile/Irritable Subscale | | | |
| Basketball Group Pretest | 44.000 | 5.000 | 3 |
| Basketball Group Posttest | 42.000 | .000 | 3 |
| Music Group Pretest | 45.750 | 7.676 | 4 |
| Music Group Posttest | 50.250 | 10.782 | 4 |
| Pretest Total Combined | 45.000 | 6.218 | 7 |
| Posttest Total Combined | 46.714 | 8.807 | 7 |
| Antisocial/Aggressive Subscale | | | |
| Basketball Group Pretest | 31.667 | 7.767 | 3 |
| Basketball Group Posttest | 29.000 | 1.732 | 3 |
| Music Group Pretest | 31.750 | 5.377 | 4 |
| Music Group Posttest | 35.250 | 7.089 | 4 |
| Pretest Total Combined | 31.714 | 5.880 | 7 |
| Posttest Total Combined | 32.571 | 6.106 | 7 |
| Defiant/Disruptive Behavior | | | |
| Basketball Group Pretest | 25.000 | 4.000 | 3 |
| Basketball Group Posttest | 23.000 | 1.732 | 3 |
| Music Group Pretest | 24.000 | 4.546 | 4 |
| Music Group Posttest | 29.000 | 6.164 | 4 |
| Pretest Total Combined | 24.429 | 3.994 | 7 |
| Posttest Total Combined | 26.429 | 5.503 | 7 |
| Antisocial Behavior Total | | | |
| Basketball Group Pretest | 100.667 | 16.623 | 3 |
| Basketball Group Posttest | 94.000 | 3.464 | 3 |
| Music Group Pretest | 101.500 | 16.783 | 4 |
| Music Group Posttest | 114.500 | 23.812 | 4 |
| Pretest Total Combined | 101.143 | 15.269 | 7 |
| Posttest Total Combined | 105.714 | 20.188 | 7 |

Research Question 2. Did participants' self-ratings of Social Competence and Antisocial Behavior differ for participants in a music-based social skills training group vs. an athletics-based group?

Self-Ratings of Social Competence

Analysis of self-ratings of Social Competence did not reveal any significant results. Self-ratings of Social Competence decreased in both groups from pretest to posttest, see Tables 12 and 13.

Table 12

Impact of Social Skills Training on Self-Ratings of Social Competence Constructs across Groups and Time (N = 7)

| Dependent Variable | <i>F</i> | <i>p</i> | Partial Eta |
|-------------------------|----------|----------|-------------|
| Social Competence Total | | | |
| Within | 6.500 | .051 | .565 |
| Between | .911 | .384 | .154 |
| Interaction | 2.218 | .197 | .307 |

Table 13

Descriptive Statistics for Self-Ratings of Social Competence (N = 7)

| Dependent Variable | Mean | Std. Deviation | <i>N</i> |
|---------------------------|--------|----------------|----------|
| Social Competence Total | | | |
| Basketball Group Pretest | 24.750 | 2.754 | 4 |
| Basketball Group Posttest | 23.000 | 3.367 | 4 |
| Music Group Pretest | 25.667 | 3.215 | 3 |
| Music Group Posttest | 19.000 | 2.646 | 3 |
| Pretest Total Combined | 25.143 | 2.734 | 7 |
| Posttest Total Combined | 21.286 | 3.546 | 7 |

Self-Ratings of Antisocial Behavior

Self-ratings of Antisocial Behavior stayed the same for the Basketball Group and increased for the Music Group, however, there were no significant differences within or between groups, see Tables 14 and 15.

Table 14

Impact of Social Skills Training on Self-Ratings of Antisocial Behavior Constructs across Groups and Time (N = 7)

| Dependent Variable | Mean | Std. Deviation | N |
|---------------------------|------|----------------|------|
| Antisocial Behavior Total | | | |
| Within | .046 | .839 | .009 |
| Between | .000 | .986 | .000 |
| Interaction | .046 | .839 | .009 |

Table 15

Pretest Descriptive Statistics for Self-Ratings of Antisocial Behavior (N = 7)

| Dependent Variable | Mean | Std. Deviation | N |
|---------------------------|--------|----------------|---|
| Antisocial Behavior Total | | | |
| Basketball Group Pretest | 16.750 | 5.315 | 4 |
| Basketball Group Posttest | 16.750 | 4.500 | 4 |
| Music Group Pretest | 16.333 | 10.408 | 3 |
| Music Group Posttest | 17.000 | 4.359 | 3 |
| Pretest Total Combined | 16.571 | 7.091 | 7 |
| Posttest Total Combined | 16.857 | 4.059 | 7 |

CHAPTER 5

DISCUSSION

In the previous chapter, pretest and posttest data representing teacher, para-educator, and self-ratings of Social Competence and Antisocial Behavior were reported and analyzed. The purpose of this final chapter is to provide a summary of the study, discussion of the findings, limitations of the study, recommendations for future research, and conclusions. This will provide additional insight into the nature of the study and expand understanding of the impact of music-based and athletics-based social skills training programs on perceptions of Social Competence and Anti-social Behavior.

Summary of the Study

The purpose of this study was to evaluate the effectiveness of a music therapy-based social skills training program compared to an athletics-based social skills training program for children with social skills deficits and interfering behavior problems. The following research questions were addressed:

1. Did adult ratings of participants' Social Competence and Antisocial Behavior differ for participants in a music-based social skills training group vs. an athletics-based group?
2. Did participants' self-ratings of Social Competence and Antisocial Behavior differ for participants in a music-based social skills training group vs. an athletics-based group?

The study included eight participants ($N = 8$) who were all members of the same classroom. The participants' homeroom teacher and para-educator used the School Social Behavior Scales, Second Edition (SSBS-2) (Merrell, 2002a) to rate each participant on Social Competence and Antisocial Behavior constructs at pretest and posttest. The student participants

rated their own Social Competence and Antisocial Behavior with the Multisource Assessment of Social Competence Scale (MASCS) (Junttila et al., 2006) at both pretest and posttest.

After completing the pretest measurement, the students were matched according to pretest scores and assigned to either the music-based social skills training group or the basketball-based social skills training group. Between pretest and posttest, both groups participated in five thirty-minute social skills training sessions, which took place once a week over the course of five weeks. Each session addressed one of four social skills training objectives including transitioning appropriately, paying attention and following teachers' instructions, receiving constructive criticism, and cooperating with peers with the final session serving as a review of all four objectives. These objectives were addressed in the context of basketball or music activities. Activities alternated between short discussions of the targeted skill and activities where those skills could be practiced. Role-playing was used to reinforce learning of each skill and rewards were provided for appropriate transitions. After five social skills training sessions, posttest ratings of Social Competence and Antisocial Behavior were collected from the homeroom teacher, para-educator, and each participant.

The Social Competence Total score based on the teacher and para-educator ratings was further categorized into three subscales representing the domains of Peer Relations, Self-Management and Compliance, and Academic Behavior. The Antisocial Behavior Total was also subdivided into three subscales including the Hostile/Irritable, Antisocial/Aggressive, and Defiant/Disruptive subscales. The simpler self-rating form was broken down into two scale totals identified as the Social Competence Total and Antisocial Behavior Total. To answer research questions 1 and 2, the mean scores for each rater were analyzed using a mixed ANOVA

to determine whether significant differences between and within the two groups were obtained between pretest and posttest.

Discussion of the Findings

To answer the first research question, the homeroom teacher and para-educator rated the participants on measures of Social Competence and Antisocial Behavior. To answer the second research question, the participants rated themselves on measures of Social Competence and Antisocial Behavior. A few notable relationships appeared among the variables when comparing teacher, para-educator, and self-ratings of the two groups. Teacher ratings of Antisocial Behavior tended to favor the Music Group. Ratings of the Antisocial/Aggressive Subscale indicated significant improvement for both groups with the Music Group improving significantly more than the Basketball Group. Ratings for the Antisocial Behavior Scale Total as well as the Defiant/Disruptive and Hostile/Irritable subscales indicated the Music Group improved while the Basketball Group got worse over time. Para-educator ratings of both Social Competence and Antisocial Behavior tended to favor the Basketball Group. Though the results were not significant, para-educator ratings indicated an increase in Social Competence and a decrease in Antisocial Behavior for the Basketball Group for the totals and all six subscales and the reverse for the Music Group. Students' self-ratings of Social Competence decreased in both groups. Self-ratings of Antisocial Behavior stayed the same for the Basketball Group and increased for the Music Group.

One noteworthy finding is that the self-ratings of Social Competence decreased in both groups from pretest to posttest, and the self-ratings of Antisocial Behavior increased for the Music Group yet stayed the same for the Basketball Group. This may have occurred because the participants became more aware of the social skills that are important to demonstrate in the

school setting. With a better understanding of the dimensions on which they were rating themselves, the participants may have been able to provide a more accurate self-assessment when filling out the form for the second time. If the decrease in self-ratings is the result of a change in awareness, this may represent a positive finding in that the students became aware that they have a problem that needs to be addressed. If the decrease is due to some other factor such as inappropriate intervention methods for the developmental stage of the participants, future researchers may need to redesign the SST program to make it more age appropriate.

Previous social skills training research has yielded mixed results. Cook et al. (2008) reviewed several studies indicating high school students with emotional and behavioral disorders (EBD) respond well to social skills training. Preschoolers also appear to respond well to social skills training. Elementary students, however, appeared to be less responsive perhaps due to developmentally inappropriate training methods. These students may have also been dealing with more severe social limitations than students who did not experience social difficulties until adolescence (Cook et al., 2008). Additional evidence indicates preschoolers and adolescents may have more motivation to develop strong social skills due to their developmental stage and may also be more responsive to modeling and coaching whereas elementary aged students with EBD may be more responsive to operant conditioning (Schneider & Byrne, 1985).

Since the participants in the current study (boys age 10-11) would be considered upper elementary or preadolescent age, modeling and coaching techniques were used in tandem with operant conditioning procedures. Ratings of Social Competence and Antisocial Behavior were mixed and appeared to vary depending on who was rating the behavior—i.e., teacher, para-educator, or student. For example, teacher ratings of Antisocial Behavior tended to favor the Music Group while para-educator ratings of both Antisocial Behavior and Social Competence

tended to favor the Basketball Group. One notable difference between the two raters is that the para-educator attended the majority of the sessions for both groups while the teacher was not able to attend any of the sessions. It is possible that the para-educator observed something while attending the groups that influenced his ratings of Social Competence and Antisocial Behavior. However, the researcher did not interview the para-educator after the completion of the study to confirm this. This evidence illustrates the importance of using multiple raters to track progress on SST goals for participants especially in situations that may introduce bias, e.g., if one rater has more opportunities to observe participants than another.

Another factor worth noting is that the participants in this study were only able to participate in five hours of SST—one hour per week over the course of five weeks. Previous research indicates 30 hours of SST over the course of 10 to 12 weeks still may not be enough to produce substantial changes in social functioning (Gresham et al., 2001). One limitation of the current study was time constraints due on both the part of the researcher as well as the participants. Perhaps more consistent results would be obtained if students were able to participate in SST for more than one hour per week over the course of an entire semester or school year or even on an ongoing basis.

Gooding (2011) used a social validity framework in three experiments with at-risk youth to determine the impact of music-based social skills training on peer relations and self-management. The intent of the current study was to expand the music therapy social skills literature to include additional research based on a social validity framework and build upon Gooding's research. Gooding's (2011) results indicated improvement on 12 out of 13 of the measures that were collected. All self-ratings, adult ratings, and behavioral observations collected by trained observers indicated improvement on measures of social competence and

antisocial behavior with the exception of the residential case manager's ratings of social competence. Gooding suggests this may have been due to the residential case manager's own interactions with the participants rather than observations of their interactions with each other. The results of the current study were more mixed.

In the current study, though many of the results indicated improvement on measures of Social Competence and Antisocial Behavior, all three raters—teacher, para-educator, and participants—indicated a decrease in functioning on at least one of the measures. Teacher ratings indicated an increase in Defiant/Disruptive behavior for members of the Basketball Group from pretest to posttest. Para-educator ratings indicated a decrease in functioning on all measures of Social Competence and an increase in Defiant/Disruptive behavior for the Music Group. Self-ratings of Social Competence decreased in both groups from pretest to posttest with ratings decreasing more for the Music Group than the Basketball Group. The participants in the current study represented a similar demographic group as the participants in Gooding's (2011) study, although Gooding's study used a greater number of participants that represented a wider age range. Perhaps additional hours of SST as recommended by Gresham et al. (2001) would also have improved the results. Gooding's study also included a more diverse age range including high school and early elementary age participants. The results of the current study appear to be consistent with previous research indicating SST with elementary age students may present more challenges (Cook et al., 2008; Schneider & Byrne, 1985).

Another important distinction between Gooding's (2011) research and the current study was Gooding's use of trained observers to measure on-task behavior. While both studies relied on self-ratings as well as ratings completed by adult staff members, the trained observers in Gooding's study may have provided more objective observations due to training in identifying

target behaviors. Gooding's research indicated the data obtained by these trained observers was the most consistent data obtained over the course of the study, which included three participant samples at three separate sites. Gooding indicated self- and adult-ratings using measurements similar to those used in the current study produced less consistent results across multiple sites, which would be more consistent with the results that were obtained in the current study (Gooding, 2011).

Inconsistency in attendance may have been another factor that influenced the results of the current study. Staum and Brotons (1995) had difficulty exploring the effectiveness of music as a reinforcer when working with elementary age children in a homeless shelter primarily due to inconsistency in attendance. Several participants in the current study were unable to attend every session due to various factors such as displaying unsafe behaviors in class periods prior to the scheduled SST sessions, suspension, meetings with therapy staff, and absence from school. Additional sessions over the course of a longer period of time may reduce the impact of these absences on the results and reveal more meaningful trends in the data.

Rickson and Watkins (2003) had teachers and residential caseworkers rate adolescent boys in a residential treatment setting using the Development Behavior Checklist. Similar to the current study, a slight increase in disruptive behavior was also observed, which according to the research may have been due to the enthusiasm the participants felt for the music therapy interventions (Rickson & Watkins, 2003). However, other factors likely influenced the results of the current study since ratings were partially based on behavior that occurred outside of the training environment for the para-educator and self-ratings and exclusively for the teacher ratings.

Since the para-educator attended the majority of the groups in the current study, it is possible that student responses to the interventions (basketball vs. music) could have influenced the para-educator's perception of their behavior. In the music setting, there were more materials to manage and greater potential for students to be disruptive with their own materials (e.g., every student has a pair of drumsticks) whereas the Basketball Group used fewer materials (e.g., one or two basketballs per activity). The majority of the participants in the current study also had music classes with the researcher prior to participation in the study and had participated in similar or identical music interventions in music class. The basketball activities led by the researcher in the current study may have been more novel for the participants in that group and therefore felt less repetitive. When students were assigned to groups at the beginning of the study, multiple students in the Music Group expressed a desire to participate in the Basketball Group instead of the Music Group.

Limitations and Recommendations for Future Research

One primary limitation of this study was sample size. The results of this study should be interpreted with caution since the small sample size violates the assumptions of a mixed ANOVA. The Partial Eta values of several measures indicated significant results may be obtained with a larger sample size both within and between groups. Future researchers should consider running a power analysis to determine the number of participants that would be required to obtain significant results based on the Partial Eta values obtained in the current study. This study was also limited to a convenience sample of one classroom of students. Future researchers who are able to access a larger sample size should randomly assign participants to treatment groups to provide greater assurance that the differences between the groups are due to treatment effects. Three to six students per group as recommended by previous research (Elliott &

Gresham, 1991) appeared to work well, so it would be recommended to repeat the same process with multiple groups rather than attempting to increase the number of students per group.

Mortality was also a major issue in analyzing the results of this study. Participant 4 was suspended from school before completing the study. Posttest data from the para-educator and teacher were included for this student, however this student was not able to complete a self-rating at posttest. Several other participants missed multiple sessions as previously described. In addition, the para-educator posttest rating form for Participant 5 was lost during the data collection process.

Other potential limitations include testing methods and instrumentation. Participant 8 appeared to have difficulty understanding and following directions when filling out the self-rating forms. This student circled multiple items and appeared to have difficulty understanding the purpose of the numbers used to rate each item. The principal and teacher were consulted prior to the study to determine whether such limitations existed among the participants, however, a test form could have been used during the assessment process to train students on how to fill out the form and screen more efficiently for challenges filling out the form. Obtaining verbal responses from each individual student in a private one-on-one setting may also have been another more effective alternative to having students fill out a form.

The rating forms used for the teacher and para-educator may have also been too tedious for the circumstances. Both the teacher and para-educator provided the same rating for every item of an entire scale for multiple participants (e.g. giving a rating of 4 for every item on the Social Competence Scale or Antisocial Behavior Scale). While the SSBS-2 has been used effectively in previous studies (Merrell, 2002b), the teacher and para-educator in this study may not have had adequate time to complete a form with so many items for the number of

participants involved. It was estimated that it would take the teacher and para-educator three to five minutes to fill out the rating forms for each student, although this was not confirmed with the two raters. This could become particularly tedious in future studies if the same form were used with a larger sample size depending on the number of forms each rater is expected to complete.

Conclusions

The data gathered in this study did not consistently support the effectiveness of the SST interventions that were used for either group. This conflicts with previous research indicating music-based SST interventions were effective over the course of a brief period of time, e.g., five sessions (Gooding, 2011). The results further validate previous research indicating interventions may need to be conducted with greater frequency over a longer period of time in order to be effective (Gresham et al., 2001). The results of the current study also revealed a great deal of inconsistency among raters highlighting the importance of using multiple raters in determining the effectiveness of SST interventions. While some of the ratings indicated significant improvement in social behavior, other results indicated a decrease in functioning in both groups. Future research is needed to determine whether this decrease in functioning is due to the SST intervention used or some other factor. If due to participation in the intervention, is the decrease temporary or would it persist over time due to methods used or some other unknown factor? Future research should continue to use multiple raters to determine the effectiveness of SST interventions as perception of improvement often varies depending on the rater, e.g. self-ratings versus adult ratings, but caution should be used in the design of future studies in order to prevent any potential bias. Future studies should also emphasize greater frequency of participation over

a longer period of time with larger sample sizes to determine whether or not more consistent results can be obtained.

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Appendix A – Session Plans

Music Sessions

(Note: Objectives, discussion questions, and skill steps for each session were taken directly from Elliot and Gresham, 1991. Rules for transitioning and receiving constructive feedback were also taken directly from Elliot and Gresham, 1991 with slight modifications in wording to suit the situation.)

Day 1: Making transitions from one classroom activity to another without wasting time or disrupting others (as defined by the rules for transitioning listed below)

Objective: The student will make transitions between classroom activities.

Materials: 7 bucket drums, 7 pairs of drumsticks, drumset, 1 authentic djembe, white board with skills for transitioning written on it.

Step 1) Meet students at their classroom before walking over. Explain to students that all students who follow the rules for transitions without any slipups get to play a beat on the drumset when they get to the music room (reinforcement).

Rules for transitioning:

- Line up at the door when asked to do so by the teacher.
- No talking.
- Keep you hands to yourself.
- Stay in line and walk silently to your next class (no running)
- Wait silently at the door until the teacher gives you permission to enter the music classroom.
- Upon entering, sit quietly in the circle of chairs.

Step 2) Walk over to the music room.

Step 3) After everyone has sat down in the music room, instruct children to pat and clap the drumset rhythm to “We Will Rock You” by Queen. Allow students who followed directions while transitioning to play either the We Will Rock You beat or their own beat one at a time on the drumset (30 seconds or less per person) while the rest of the group pats the We Will Rock You rhythm.

Step 4) Processing:

Why is it important to follow these rules when transitioning?

- Class runs better when students change tasks quickly and quietly.

- People have more time to learn when they don't waste time changing activities.
- Teachers can teach better when students change activities without being loud and distracting.
- Changing activities nicely shows respect for the teacher.

Identify the skill steps/have students repeat them

- When instructed to transition to a new activity, do so quickly and quietly.
- Listen to and follow your teacher's instructions.
- No talking.
- Keep you hands to yourself.
- Wait patiently for the teacher's instructions
- When transitioning to a new classroom, stay in line and walk silently to your next class (no running).

Step 5) Bucket Drum Jam

- a) Transition into playing bucket drums to learn new drum set beats. State "Now we're going to learn some new beats on our bucket drums so keep these skills in mind as we transition from our discussion to this new activity."
- b) Instruct students to pick up a bucket drum from the center of the circle and quietly set it in front of their seat.
- c) Pass out one pair of sticks per person and instruct students to quietly hold them in their lap or set them on the floor until they are given instructions for what to play. Instruct students to keep their sticks in their hands throughout the activity and inform them that if one of their sticks goes flying through the air during the activity, they will lose their bucket drumming privileges, and if this occurs they will have an opportunity to earn the sticks and bucket back by practicing the beats by patting on their lap.
- d) Instruct students to get into ready position (sitting up straight holding sticks out above the drum).
- e) Demonstrate one note by hitting the drum in the center one time.
- f) Instruct students to play one note together by saying, "Play one note together. One, two, ready, play – BOOM!!!"
- g) Then repeat instruction (e) while having students play 2 notes together and then 3 notes together to get them to focus and start listening to each other.
- h) Instruct students to "Repeat after me" and play a simple rock rhythm for four beats (e.g. We Will Rock You rhythm for them to repeat) having them repeat the pattern on the next four beats. Show students the difference between a bass drum note on the bucket (played in the center of the top of the bucket) and a rimshot (played on the rim).

- i) Continue saying “Repeat after me” and gradually make the beat slightly more challenging, e.g., playing more syncopated rock and hiphop beats.
- j) When the beat gets too challenging, instruct the students to play a “rumble” by yelling “RUMBLE!!!” and playing loud and fast on the bucket.
- k) Instruct students to repeat after one of the students by saying, “One, two, repeat after (insert student’s name).”
- l) Continue around the circle until all students have had an opportunity to play a beat for others to repeat.
- m) After the last student has played a beat, instruct students to “repeat after me,” play one last beat that everyone can play and finish with another rumble.
- n) Instruct students to stack up their buckets in the middle of the circle, place their sticks in one of the buckets, and return to their seats.

Step 6) Negative and Positive modeling:

- a) Review step 4. What are the skills that are necessary for students to transition successfully to a new activity?

Have students take turns reading the skill steps off the board:

- When instructed to transition to a new activity, do so quickly and quietly.
- Listen to and follow your teacher’s instructions.
- No talking.
- Keep you hands to yourself.
- Wait patiently for the teacher’s instructions

Tell students: We are transitioning now from playing bucket drums to having a discussion about what we learned from this activity. Why is it important to practice these skills when transitioning between activities?

- Class runs better when students change tasks quickly and quietly.
- People have more time to learn when they don’t waste time changing activities.
- Teachers can teach better when students change activities without being loud and distracting.
- Changing activities nicely shows respect for the teacher.

- b) Can anyone tell us what not to do when transitioning from playing bucket drums to having a discussion?

...e.g., continue playing, throw sticks in the air, hit your neighbor with your sticks, etc.

- c) Ask a student to roleplay as the teacher while you play the student. The student instructs you to put your bucket drum and sticks in the center and return to your seat. After receiving this instruction, you model one of the above inappropriate behaviors for negative modeling.
- d) Next, have the student repeat the instruction and quietly put the bucket and sticks in the center and return to your seat.
- e) Ask the student what it felt like when he/she gave you an instruction and you didn't follow directions? After listening to their response say, "See, it doesn't feel good when you're the teacher when a student doesn't follow directions. That can make the teacher feel disrespected and then your day won't go as smoothly because you're not getting along well with the teacher."
- f) Next, ask the student what it felt like when you did follow their directions? After listening to their response say, "See, the teacher stays in a better mood when students follow directions. Then the class can accomplish more and the whole day can be more fun."

Step 7) Instruct to students to look at the board one more time before returning to class. Tell them that you are going to show them a new instrument when they get back to class and students who follow directions during the transition and can remember at least one skill for transitioning when they get back to class will have a chance to play the new instrument (authentic djembe) before starting their next class.

Step 8) Walk to next class with students. Show students the djembe. Ask students to state one of the transition skills when they get back. Allow students who transitioned successfully and stated one of the transition skills to play a beat on the djembe. Help may be provided from peers or the instructor for students who have difficulty remembering the transitioning skills, but students who did not follow directions during the actual transition should not be allowed to play the djembe in order to avoid reinforcing inappropriate behavior. These students will be told that they will have another opportunity to play an instrument at the end of the next session if they do a better job of following directions.

Day 2 – Paying attention to and following teacher’s instructions

Objective: The student will pay attention to and follow teachers’ instructions.

Review: The student will make transitions between classroom activities.

Materials: Electric bass (researcher will bring his personal electric bass which students haven’t played before to achieve a novelty effect), open-tuned electric guitar, drumset, electronic keyboard (with D-chord labeled), timbales, hand drums, mixed percussion instruments, white board with markers.

Step 1) Meet students at their classroom before walking over. Explain to students that all students who follow the rules for transitions without any slipups get to pluck the electric bass when they get to the music room (reinforcement).

Rules for transitioning:

- Line up at the door when asked to do so by the teacher.
- No talking.
- Keep you hands to yourself.
- Stay in line and walk silently to your next class (no running)
- Wait silently at the door until the teacher gives you permission to enter the music classroom.
- Upon entering, sit quietly in the circle of chairs.

Step 2) Walk over to the music room and have students sit down in the circle of chairs.

Step 3) Bring the electric bass in to the middle of the circle and allow students who transitioned appropriately to pluck the bass one at a time. After everyone has had a chance set the bass aside.

Step 4) Warmup Rock Band Jam

- a) Before allowing students to choose instruments, lay down ground rules for the opening jam:
 - a. Once you are seated with your instrument, wait quietly until the teacher has give you permission to play.
 - b. Only play as instructed for the opening jam.
 - c. When told to play a rumble, play loud and fast until the teacher gives the cue to stop (Note: On the keyboard, instruct students not to bang the keys when playing loud and fast, but to just play faster until it’s time to stop).
 - d. Keyboard player only plays notes with stickers (Dm chord) and guitar player only plays open chord (Dm).

- e. For all jams, keyboard players are not allowed to press any buttons except for the gray buttons, which change the sound of the keyboard (can't press yellow or red buttons).
 - f. Tell students if they forget one of these rules during the jam, they will be reminded by the teacher, but if they engage in horseplay or deliberately choose not to follow instructions, they will be asked to come back to the circle and keep the beat using vocal or body percussion. They can earn back the opportunity to play an instrument once they demonstrate good behavior and consistent participation with vocal/body percussion.
- b) Pick students one at a time to select an instrument: either electric guitar, drumset, electronic keyboard, hand drums, or mixed percussion.
 - c) Once all students have an instrument, instruct students to play one note together by saying, "Play one note together. One, two, ready, play – BOOM!!!" (demonstrate one note by playing one note on the electric bass if they don't get it on the first try)
 - d) Then repeat instruction (e) while having students play 2 notes together and then 3 notes together to get them to focus and start listening to each other.
 - e) Instruct the drumset player to play the We Will Rock You Beat on the floor tom (or bass drum for advanced students) and snare drum. Instruct the rest of the group to play with the floor tom on the following beats:

1 + off 2 + off

- f) Instruct students to stop and reset so they can all start together. Cue students to start again together by saying, "One, two, ready play!"
- g) Cue students to gradually play more and more quietly by making a *shhh* gesture (one finger to the mouth) and bringing hand lower and lower. After students quiet down, cue them to stop. Explain to them that we will switch instruments and jam some more in a few minutes but now it is time to come back and sit in the circle.

Step 5) Tell them:

Today we're going to talk about how you can be better students by paying attention to your teacher and following your teacher's directions.

- What do you think would happen in your class if the students refused to listen to your teacher's instructions on an assignment? (The students probably wouldn't learn; they wouldn't know what to do on the assignment and might do it incorrectly; and so on.)
- What are some things that happen when you listen to a teacher's directions (on an assignment for example)? (You learn what's going on; you learn when to do something, and so on.)

- Why don't you always listen to the teacher's instructions? (Sometimes you aren't paying attention; you may be doing something else; you may be distracted by sounds or noises; and so on.)
- How can you tell if someone is listening? (The person looks at the speaker and does what the speaker says.)
- What can you do if you're not sure what the teacher is saying? (You can raise your hand, ask questions, and so on.)

Step 6) Identify the skill steps; have the students repeat them.

- A. Sit quietly and face your teacher.
- B. Look at your teacher's face and look interested.
- C. Think about what your teacher is saying.
- D. Decide if you understand the directions.
- E. If you don't understand what to do, ask questions.
- F. Follow your teacher's instructions

Step 7) Instruct the students: Now we are going to have another jam session and you're going to use these listening skills to make sure you know what the directions are.

Step 8) Before picking students to choose instruments, set new rules for the current jam. Remind students to use the listening skills just discussed when listening to the directions:

- a. Once you are seated with your instrument, wait quietly until the teacher has give you permission to play.
- b. Do not switch instruments until instructed to do so.
- c. Keyboard player and guitar player can play any notes they want as long as they practice good communication skills and stop when instructed to stop by the researcher (researcher keeps the tonality grounded by improvising bass lines based in the modes of C major, which matches the white keys on the piano and the open-tuned d-minor guitar). Tell the keyboard player that the white keys fit with the open chord of the guitar but to feel free to explore the black keys as well.
- d. Listen to each other and maintain occasional eye contact with other group members.
- e. Tell students: If students don't follow these rules, they will be asked to come back to the circle and pat the beat using vocal or body percussion until the next jam.

Step 9) Ask if anyone has any questions about the rules.

Step 10) Ask for a volunteer to start the jam.

Step 11) Begin jamming. Researcher uses the bass line to support the rest of the group, encourages nonverbal communication, and uses the bass or verbal/nonverbal cues to help the group create a steady groove together if necessary but allows the participants to explore independently as much as possible.

Researcher observes throughout whether or not the students are following the rules for the jam.

Step 12) Allow the jam to continue for a minute or two giving the students time to get in sync with each other and explore different sounds. After a couple of minutes, cue the students to stop by saying, “4, 3, 2, 1 – STOP”

Step 13) Briefly discuss whether or not everyone followed the rules.

Step 14) State that the students are going to switch instruments and begin another jam with new rules. Before switching instruments state the new rules:

- a) This time you can start playing as soon as you get to your instrument as long as you pay attention to others and adjust to the group once they start playing.
- b) You can ask others to switch instruments during the jam. If they say yes, you can switch or pick a new instrument one time during the jam. Only once.
- c) Keyboard player and guitar player can play any notes they want as long as they practice good communication skills and stop when instructed to do. Tell the keyboard player that the white keys fit with the open chord of the guitar but to feel free to explore the black keys as well. Same goes for guitar.

Step 15) Ask if anyone has any questions about the new rules.

Step 16) Instruct students to begin as instructed according to the new rules.

Step 17) Begin jamming. Researcher uses the bass line to support the rest of the group, encourages nonverbal communication, and uses the bass or verbal/nonverbal cues to help the group create a steady groove together if necessary but allows the participants to explore independently as much as possible.

Researcher observes throughout whether or not the students are following the rules for the jam.

Step 18) Allow the jam to continue for a minute or two giving the students time to get in sync with each other and explore different sounds. After a couple of minutes, cue the students to stop by saying, “4, 3, 2, 1 – STOP”

Step 19) Briefly discuss whether or not everyone followed the new rules.

Step 20) Negative role-playing

Tell the students: Now we are going to do some role-playing to see what would happen if you didn't practice good listening skills. This time when I give you the new rules for our next jam, I want you to talk to each other about lunch/recess, walk around the room looking at and playing instruments and out the window, walk up to me to try to ask me if you can go to the bathroom, not paying any attention to me at all while I give you instructions for the next jam. We will start the roleplay when I say “Go.” Once I'm done giving the instructions, I will say “STOP,” and then I will tell you to begin the next jam according to the new instructions.

Step 21) Say, “Go.” While students are role-playing poor classroom behavior give instructions for the next jam:

- a) This time you have to wait until I give you permission to play. I will pick one person to start the jam.
- b) You can switch instruments or pick a new instrument two times during the jam.
- c) Only play white keys on the piano and only play the open chord on the guitar.

Step 22) After giving the instructions say “STOP” then instruct students to pick instruments begin the next jam according to the new instructions.

Step 23) Begin jamming. Allow the jam to continue for a minute or two giving the students time to get in sync with each other and explore different sounds. Observe whether or not students are following the new rules. After a couple of minutes, cue the students to stop by saying, “4, 3, 2, 1 – STOP”

Step 24) Ask everyone to return to the circle. Ask the group, “What were the rules for this jam? Briefly discuss whether or not everyone followed the new rules. “What happens when you don't use good listening skills while a teacher is giving instructions?” Briefly discuss.

Step 25) Instruct to students to look at the board one more time before returning to class. Tell them that you are going to show them a new instrument when they get back to class and students who follow directions during the transition and can

remember at least one skill for following directions when they get back to class will have a chance to play the new instrument (gong) before starting their next class).

Step 26) Walk to next class with students. Show students the gong. Ask students to state one of the transition skills when they get back. Allow students who transitioned successfully and stated one of the skills for following directions to strike the gong one time. Help may be provided from peers or the instructor for students who have difficulty remembering the transitioning skills, but students who did not follow directions during the actual transition should not be allowed to play the gong in order to avoid reinforcing inappropriate behavior. These students will be told that they will have an opportunity to play another instrument at the end of the next session if they do a better job of following directions.

Day 3 – Receiving criticism/feedback well

Objective: The student will receive criticism/feedback well.

Review: The student will make transitions between classroom activities.

Review: The student will pay attention to and follow teachers' instructions.

Materials: Hand drums, mixed percussion instruments, small steel drum with mallets, picture of Caribbean steel drum player, whiteboard with markers.

Step 1) Meet students at their classroom before walking over. Explain to students that all students who follow the rules for transitions without any slipups both on the way to music and the way back to the classroom will get to play a new instrument when they get back to their classroom (reinforcement). Ask the participants if they remember the rules for transitioning. Supply any rules that they forget.

Rules for transitioning:

- Line up at the door when asked to do so by the teacher.
- No talking.
- Keep your hands to yourself.
- Stay in line and walk silently to your next class (no running)
- Wait silently at the door until the teacher gives you permission to enter the music classroom.
- Upon entering, sit quietly in the circle of chairs.

Step 2) Walk over to the music room and have students sit down in the circle of chairs.

Step 3) Tell the students they will be learning how to lead a drum circle today. Remind them that while they listen to the instructions for the first activity then need to:

- A. Sit quietly and face your teacher.
- B. Look at your teacher's face and look interested.
- C. Think about what your teacher is saying.
- D. Decide if you understand the directions.
- E. If you don't understand what to do, ask questions.
- F. Follow your teacher's instructions

Step 4) State the rules for the first activity:

- a) When you get your instrument, wait until I tell you to play to start playing.
- b) Once I count the group off, you can play whatever you want on your drums as long as you're paying attention to the rhythms everyone else is playing. You can change the rhythm however you want as we play.
- c) I'm going to cue you to stop playing individually. If I look at you and hold up my hand like I'm saying stop, then you stop while the rest of the group keeps playing. Wait until I look at you and nod to start playing again.
- d) If students don't follow these rules, they will be asked to put their instrument down and pat along using body percussion until they demonstrate that they can follow directions.

Step 5) Allow students to choose instruments. Once instruments have been selected, cue the group to begin by saying, "One, Two, Ready, Play!!!"

Step 6) After the group has played together for a few seconds and gotten in sync with each other rhythmically, point to students one at a time to cue them to stop while the rest of the group continues playing and then cue them to come back in. Mix it up pointing to different instruments and varying numbers of players to demonstrate how this type of cueing changes the sound.

Step 7) Cue the group to stop by saying, "One, Two, Ready, Stop!!" Instruct students to set their instruments aside.

Step 8) Introduce the skill and ask questions about it: Today as we're learning about how to lead a drum circle, we're going to talk about how we accept feedback or constructive criticism because it makes you a better leader, a better musician, and a better student if you can accept feedback and use that feedback to improve your performance.

- Have you ever received constructive criticism for something? What were you given feedback on?
- What does the word *feedback* mean? What is constructive criticism?

- Why do people give each other constructive criticism?
- What are some ways people give each other feedback? What examples can you give me of constructive and nonconstructive criticism?
- What happens when someone like a teacher or a parent provides constructive criticism and you get mad?
- What are some ways we have used constructive criticism in this group?

Step 9) Highlight important points of this skill: Responding to constructive feedback by listening to it, remaining calm, recognizing the intent of the message the person doing the criticizing is giving you, and changing your actions based on the feedback.

Step 10) Discuss why the skill is important

- Many times you can learn to do something better if you listen to constructive criticism.
- The intent of constructive criticism is to make you more successful as you do something.
- Constructive criticism can be useful if you listen to the message the person is trying to give you.

Step 11) Identify these skill steps; have students repeat them.

- A. Establish eye contact with the person who is providing feedback.
- B. Listen to what the person is saying.
- C. Decide what the message is. Ask yourself, "Is this feedback constructive or nonconstructive?"
- D. If feedback is constructive, take feedback and try again.
- E. Ask questions if you don't understand what to do.

Step 12) Instruct the students that they will now have the chance to take turns leading a drum circle according to the following instructions:

- Start the group by saying, "1, 2, Ready, Play..."
 - The researcher will hold the pulse at the tempo that the student counts the group off at and the rest of the group can play whatever they want around the pulse. The leader can speed the pulse up by using hand gestures to cue the researcher to play faster or slower.
- After the group has played together for a few seconds and gotten a steady rhythm going, the leader points to students one at a time to cue them to stop while the rest of the group continues playing and then cues them to come back in. Tell them they can mix it up by pointing to different instruments and varying numbers of players to get different sounds just like I did at the beginning.

- Optional: Cueing the group to play louder or softer by raising hands up towards the ceiling for louder or using the shhh gesture and bringing hand down toward the floor for quieter.
- Stop the group by saying, “1, 2, Ready, Stop...” and give stop gesture.

Encourage the students to make good eye contact with group members and make big gestures so everyone can see and understand their cues well.

Step 13) Choose one student to be the first leader. Instruct the rest of the students to pick one percussion instrument and sit in a half circle with the leader standing in front of the group.

Step 14) Ask the first leader if they have any questions about the instructions. Once questions are answered, instruct the leader to count the group off.

Step 15) Researcher holds the pulse for the group and allows the leader to lead without providing prompts to follow all directions. Each student will be allowed to lead the group for at least 1-2 minutes. If the student goes over the time limit, the researcher will prompt the student to stop the group.

Step 16) After the student leads, the researcher will tell the student that he will now give the group an opportunity to give them feedback on their leadership during the drum jam.

Step 17) The researcher will remind the leader to:

- A. Establish eye contact with the person who providing feedback.
- B. Listen to what the person is saying.
- C. Decide what the message is. Ask yourself, “Is this feedback constructive or nonconstructive?”
- D. If criticism is constructive, thank the person providing the feedback and tell them that you will keep that in mind next time you have the opportunity to lead.
- E. Ask questions about the feedback if you don’t understand.

Step 18) Instruct students to think about what the leader did well and what they could improve on—what other students can do in the next round to make it easier to follow the leader. Instruct students to raise their hands in order to provide the leader with feedback. Allow time to discuss a couple of comments and provide additional feedback if time permits. Provide prompts for students to make good eye contact if necessary.

Step 19) Ask the leader if they have any questions and provide additional clarification on feedback if necessary.

Step 20) Repeat steps 14-19 with the remaining students.

Step 21) After the conclusion of the last drum circle jam, instruct to students to look at the board one more time before returning to class. Tell them that you are going to show them a new instrument when they get back to class and students who follow directions during the transition and can remember at least one skill for receiving feedback when they get back to class will have a chance to play the new instrument before starting their next class).

Step 22) Walk to next class with students. Show students the steel drum and a picture of a Caribbean steel drum player. Ask students to state one of the transition skills when they get back. Allow students who transitioned successfully and stated one of the skills for receiving feedback skills to play the steel drums for a few seconds each. Help may be provided from peers or the instructor for students who have difficulty remembering the transitioning skills, but students who did not follow directions during the actual transition should not be allowed to play the gong in order to avoid reinforcing inappropriate behavior. These students will be told that they will have an opportunity to play another instrument at the end of the next session if they do a better job of following directions.

Day 4 – Cooperating with peers without prompting

Objective: Without prompting, the student will cooperate with others by listening, sharing ideas, making positive comments, helping others, and encouraging others.

Review: The student will make transitions between classroom activities.

Review: The student will pay attention to and follow teachers' instructions.

Review: The student will receive criticism/feedback well.

Materials: Drum set, electric guitar, electric bass, electronic keyboard, hand drums, mixed percussion, ukulele, white board with markers.

Step 1) Meet students at their classroom before walking over. Explain to students that all students who follow the rules for transitions without any slipups both on the way to music and the way back to the classroom will get to play get to play a new instrument when they get back to their classroom (reinforcement). Ask the students if they remember the rules for transitioning. Supply any rules that they forget.

Rules for transitioning:

- Line up at the door when asked to do so by the teacher.
- No talking.
- Keep you hands to yourself.
- Stay in line and walk silently to your next class (no running)

- Wait silently at the door until the teacher gives you permission to enter the music classroom.
- Upon entering, sit quietly in the circle of chairs.

Step 2) Walk over to the music room and have students sit down in the circle of chairs.

Step 3) Tell them that today we're going to talk about cooperation. When people cooperate, they can accomplish a lot more than when they don't cooperate. So today, to warm up, we're going to play a rock band groove together as an example of how much more we can accomplish when we work together.

Step 4) Assign instruments. Try to give students a chance to play an instrument they haven't tried yet. Make sure each student has a different instrument that can be distinctly heard in the mix (e.g., only one of each voice—not two guitars or two hand drummers).

Step 5) To warm up, instruct students to play one note together by saying, "One, Two, Ready, Play...(Boom)!!" Continue by playing two and three notes together.

Step 6) Instruct students to play the We Will Rock You Beat all together as a group and count them off as before.

Step 7) After the group has warmed up on the We Will Rock You Beat, ask for a volunteer to take a solo. Before giving instructions, remind students of the skills they learned previous for following instructions:

Following Directions:

- A. Sit quietly and face your teacher.
- B. Look at your teacher's face and look interested.
- C. Think about what your teacher is saying.
- D. Decide if you understand the directions.
- E. If you don't understand what to do, ask questions.
- F. Follow your teacher's instructions

Step 8) State the instructions for the rock jam:

- The whole group will start with the We Will Rock You Beat.
- The researcher will cue a break in which the soloist will take a short rhythmic solo (white keys on the piano, open chord on guitar, drum fills on drums) while the other students drop out for a few beats.
- Then the researcher will cue the rest of the group to come back in.

Step 9) Ask if students have questions. When the instructions have been clarified, instruct students to begin with the beat by counting them off. (Instructor provides support on bass throughout).

Step 10) Once students are playing the beat together, instruct students to stop for the soloist to take a solo by saying, “One, Two, Ready, Guitar Solo!!” (or whatever the instrument happens to be). Nod at the student to cue them to take a short solo, then cue the group to come back in by saying “One, Two, Everybody Play!!”

Step 11) Cue group to stop and repeat this process with each student that wants to take a solo.

Step 12) After everyone who wants to solo has had a chance, wrap up by bringing attention to the fact that their solos can sound a lot cooler if they have the whole band backing them up than if they just played the same thing by themselves. Much more can be accomplished when people combine their skills and abilities and work together.

Step 13) Instruct students to return to their seats in the circle.

Step 14) Introduce the skill and ask questions about it: Today we’re going to talk about how you can get along with other students by cooperating with them.

- What does the word *cooperate* mean?
- Why do people cooperate? (They want to finish a task, achieve a goal, and so on.)
- What are some things people might do to show they are cooperating? (They might work together in a friendly way, listen well, make positive comments to others, help each other, and so on.)
- What are some things people do that show they are not cooperating? (They argue, refuse to listen, act selfish, say bad things to others, and so on.)
- What are some good things that can happen when people cooperate? (The people finish a job, get more done, get something done better, feel good about the group and themselves, and so on.)
- What can happen when people don’t cooperate? (They might not finish a job; they might be unhappy with the results; and so on.)

Step 15) Define the skill: Cooperating with peers by listening, sharing ideas, making positive comments, helping others, and encouraging others.

Step 16) Identify these skill steps; have students repeat them.

- A. Identify ways you can cooperate, such as taking turns, sharing and having each person do a separate thing.
- B. Decide who will be first and who will do what

- C. Encourage each other by making positive comments, smiling, using the “thumbs up” gesture, and so on. Do this until you have finished the task or have reached the group’s goal.
- D. Congratulate each other when you finish the task.

Step 17) Music Activity: Instruct students that we’re going to do a music activity that mimics cooperation in the classroom. During the activity they will alternate between having a group jam and individual call and response.

Rules for taking turns with Call and Response (light-hearted review of following rules):

- If I say, “One, Two, Everybody Play!!” then everyone can play whatever they want while I keep the pulse.
- When I say, “One, Two, Raise Your Hands...” they have to raise their hands if they want to take turns playing call and response with me. When you raise your hand, tell them they must display good classroom behavior (waiting quietly and patiently to be called on).

Step 19) Start the group off by saying, “One, Two, Everybody Play!!” Allow everyone to play whatever they want while keeping the pulse to support the students.

Step 20) Say, “One, two, raise your hands!!” Students should stop playing here and raise their hands to do call and response. Point to a student who is demonstrating good classroom behavior while raising their hand and play a simple 4 beat pattern for them to repeat. Go back and forth a few times and then bring the rest of the group back in by saying, “One, Two, Everybody Play!!”

Step 21) Repeat this process with the remaining students until everyone has had a chance to go.

Step 22) After everyone has had a chance to go, tell the group that you will now give each of them brief feedback on how well they followed instructions. Remind them of the skills for receiving feedback:

Receiving Feedback:

- A. Establish eye contact with the person who providing feedback.
- B. Listen to what the person is saying.
- C. Decide what the message is. Ask yourself, “Is this feedback constructive or nonconstructive?”
- D. If criticism is constructive, thank the person providing the feedback and tell them that you will keep that in mind next time you have the opportunity to lead.
- E. Ask questions about the feedback if you don’t understand.

Give each student feedback on how well they followed directions to wait quietly and patiently with their hand raised while waiting their turn to do call and response with the teacher.

Step 23) Negative role-playing: Instruct students that they will now do the same thing one more time except this time they will be asked to role-play bad classroom behavior when it comes time to raise their hands. So this time, when instructed to raise their hand, they will pretend to compete for the teacher's attention by hollering the teacher's name while raising their hand, walking up to the teacher to try to ask the teacher if they can go next, etc.

Step 24) Start the group off just like before by saying, "One, Two, Everybody Play!!" Allow everyone to play whatever they want while keeping the pulse to support the students.

Step 25) Say, "One, two, raise your hands!!" Students should stop playing here and raise their hands to do call and response, except this time students will role-play poor classroom behavior while raising their hands to go next. Ignore all poor classroom behavior and wait for students to get back on task before continuing. Allow the role-play of poor classroom behavior to continue to 30 seconds or so and then instruct the class that we will continue when they start showing good classroom behavior.

Step 26) End role-play and ask students to describe what happens when they get off-task in class and stop cooperating with the teacher and each other:

- The teacher has to stop the class and wait for students to get back on task
- Less work is accomplished
- Students lose privileges when time is wasted

Step 27) End the group with one final jam by counting the group off and playing for a minute or two. End with a rumble by saying, "One, Two, Play Loud!!" and play loudly on your own drum. End the jam by saying "One, Two, Everybody Stop!!!"

Step 28) After the conclusion of the last drum circle jam, instruct to students to look at the board one more time before returning to class. Tell them that you are going to show them a new instrument when they get back to class and students who follow directions during the transition and can remember at least one skill for cooperation when they get back to class will have a chance to play the new instrument before starting their next class).

Step 29) Walk to next class with students. Show students the ukulele. Ask students to state one of the transition skills when they get back. Allow students who transitioned successfully and stated one of cooperation skills to play the ukulele.

Help may be provided from peers or the instructor for students who have difficulty remembering the transitioning skills, but students who did not follow directions during the actual transition should not be allowed to play the ukulele in order to avoid reinforcing inappropriate behavior. These students will be told that they will have an opportunity to play another instrument at the end of the next session if they do a better job of following directions.

Day 5 – Review Session

Review: The student will make transitions between classroom activities.

Review: The student will pay attention to and follow teachers' instructions.

Review: The student will receive criticism/feedback well.

Review: Without prompting, the student will cooperate with others by listening, sharing ideas, making positive comments, helping others, and encouraging others.

Materials: Drum set, electric guitar, authentic djembe, electronic keyboard, hand drums, mixed percussion, white board with markers.

Step 1) Meet students at their classroom before walking over. Explain to students that all students who follow the rules for transitions without any slipups both on the way to music and the way back to the classroom will get to play get to play a new instrument when they get back to their classroom (reinforcement). Ask students if they remember the rules for transitioning. Supply any rules that they forget.

Rules for transitioning:

- Line up at the door when asked to do so by the teacher.
- No talking.
- Keep you hands to yourself.
- Stay in line and walk silently to your next class (no running)
- Wait silently at the door until the teacher gives you permission to enter the music classroom.
- Upon entering, sit quietly in the circle of chairs.

Step 2) Walk over to the music room and have students sit down in the circle of chairs.

Step 3) Tell them today is going to be all review. We've talked about transitioning, paying attentions to and following teacher's instructions, responding to constructive criticism, and cooperating with others. We're going to start with a jam to warm up and then later on they'll have a chance to lead the group again.

Step 4) Remind students of the skills for paying attention to directions:

Following Directions:

- A. Sit quietly and face your teacher.
- B. Look at your teacher's face and look interested.
- C. Think about what your teacher is saying.
- D. Decide if you understand the directions.
- E. If you don't understand what to do, ask questions.
- F. Follow your teacher's instructions

Step 5) Warmup Rock Band Jam

- a) Before allowing students to choose instruments, lay down ground rules for the opening jam:
 - 1. Once you are seated with your instrument, wait quietly until the teacher has give you permission to play.
 - 2. Only play as instructed for the opening jam.
 - 3. When told to play a rumble, play loud and fast until the teacher gives the cue to stop (Note: On the keyboard, instruct students not to bang the keys when playing loud and fast, but to just play faster until it's time to stop).
 - 4. Keyboard player only plays notes with stickers (Dm chord) and guitar player only plays open chord (Dm).
 - 5. For all jams, keyboard players are not allowed to press any buttons except for the gray buttons, which change the sound of the keyboard (can't press yellow or red buttons).
 - 6. If students don't follow these rules, they will be asked to come back to the circle and pat the beat using vocal or body percussion until the next jam.
- b) Pick students one at a time to select an instrument: either electric guitar, drumset, electronic keyboard, hand drums, or mixed percussion.
- c) Once all students have an instrument, instruct students to play one note together by saying, "Play one note together. One, two, ready, play – BOOM!!!" (demonstrate one note by playing one note on the electric bass if they don't get it on the first try)
- d) Then repeat instruction (c) while having students play 2 notes together and then 3 notes together to get them to focus and start listening to each other.
- e) Instruct the drumset player to start the group with a beat. They may make up their own beat, keep a steady pulse, or play the We Will Rock You Beat on the floor tom (or bass drum for advanced students) and snare drum. Instruct the rest of the group to listen to the drummer and follow the drummer's beat. Instruct the drummer to begin when ready. Instruct the rest of the group to come in after the drummer starts when they are ready to.

Note: The researcher provides rhythmic and harmonic support on upright or electric bass.
- f) Cue students to gradually play more and more quietly by making a *shhh* gesture (one finger to the mouth) and bringing hand lower and lower. After students quiet down, cue them to stop.

Step 6) Instruct students that they will now practice cooperation skills, which will include switching instruments without fighting or arguing and taking turns taking solos.

Step 7) Remind students of the cooperation skills they learned previously:

Cooperating w/ Other without Prompting

- A. Identify ways you can cooperate, such as taking turns, sharing and having each person do a separate thing.
- B. Decide who will be first and who will do what
- C. Encourage each other by making positive comments, smiling, using the “thumbs up” gesture, and so on. Do this until you have finished the task or have reached the group’s goal.
- D. Congratulate each other when you finish the task.

Step 8) Allow students an opportunity to switch instruments before beginning.

Step 9) State the instructions for soloing:

- The whole group will start with a beat chosen by the drummer.
- The researcher will cue a break in which the soloist will take a short rhythmic solo (white keys on the piano, open chord on guitar, drum fills on drums) while the other students drop out for a few beats.
- Then the researcher will cue the rest of the group to come back in.

Step 9) Ask if students have questions. When the instructions have been clarified, instruct students to begin with the beat by counting them off. (Instructor provides support on bass throughout).

Step 10) Once students are playing the beat together, instruct students to stop for the soloist to take a solo by saying, “One, Two, Ready, Guitar Solo!!” (or whatever the instrument happens to be). Nod at the student to cue them to take a short solo, then cue the group to come back in by saying “One, Two, Everybody Play!!”

Step 11) Cue group to stop and repeat this process with each student that wants to take a solo. Allow students to switch instruments throughout if they want to try soloing on different instruments.

Step 12) After everyone who wants to solo has had a chance, remind students how much more they can do with their solos when the whole band backing them up and this also true in school, work, and relationships in general. Much more can be accomplished in a supportive cooperative environment.

Step 13) Tell students that they will now have an opportunity to lead the group again the way they did on the drum circle day except they will be allowed to choose any instrument they want to play (not just drums). Remind them that you will be giving them some feedback on how they did after they lead.

Step 14) Instruct the students that they will now have the chance to take turns leading a jam according to the following instructions:

- Start the group by saying, “1, 2, Ready, Play...”
 - The researcher will hold the pulse at the tempo that the student counts the group off at and the rest of the group can play whatever they want around the pulse. The leader can speed the pulse up by using hand gestures to cue the researcher to play faster or slower.
- After the group has played together for a few seconds and gotten a steady rhythm going, the leader points to students one at a time to cue them to stop while the rest of the group continues playing and then cues them to come back in. Tell them they can mix it up by pointing to different instruments and different numbers of players like they did the first time they did this activity.
- Optional: Cueing the group to play louder or softer by raising hands up towards the ceiling for louder or using the shhh gesture and bringing hand down toward the floor for quieter.
- Stop the group by saying, “1, 2, Ready, Stop...” and give stop gesture.

Encourage the students to make good eye contact with group members and make big gestures so everyone can see and understand their cues well.

Step 13) Choose one student to be the first leader. Instruct the rest of the students to pick one instrument and sit in a half circle with the leader standing in front of the group.

Step 14) Ask the first leader if they have any questions about the instructions. Once questions are answered, instruct the leader to count the group off.

Step 15) Researcher holds the pulse for the group and allows the leader to lead without providing prompts to follow all directions. Each student will be allowed to lead the group for at least 1-2 minutes. If the student goes over the time limit, the researcher will prompt the student to stop the group.

Step 16) After the student leads, the researcher will tell the student that he will now give the group an opportunity to give them feedback on their leadership during the jam.

Step 17) The researcher will remind the leader of the skills for receiving constructive criticism/feedback:

Receiving Constructive Criticism/Feedback

- A. Establish eye contact with the person who providing feedback.
- B. Listen to what the person is saying.

- C. Decide what the message is. Ask yourself, “Is this feedback constructive or nonconstructive?”
- D. If criticism is constructive, thank the person providing the feedback and tell them that you will keep that in mind next time you have the opportunity to lead.
- E. Ask questions about the feedback if you don’t understand.

Step 18) Instruct students to think about what the leader did well and what they could improve on—what other students can do in the next round to make it easier to follow the leader. Instruct students to raise their hands in order to provide the leader with feedback. Allow time to discuss a couple of comments and provide additional feedback if time permits. Provide prompts for students to make good eye contact if necessary.

Step 19) Ask the leader if they have any questions and provide additional clarification on feedback if necessary. Also take a moment to relate feedback on their leadership during the jam to their participation in all of the activities over the course of the program. Focus mostly on strengths and give a couple of suggestions for things they can improve upon.

Step 20) Repeat steps 14-19 with the remaining students.

Step 21) After the conclusion of the last drum circle jam, instruct to students to look at the board one more time before returning to class. Tell them that when they get back to class students who follow directions during the transition and can remember at least one skill for receiving feedback will have a chance to play the authentic djembe one more time before starting their next class.

Step 22) Walk to next class with students. Show students the djembe. Ask students to state one of the transition skills when they get back. Allow students who transitioned successfully and stated one of the skills for receiving feedback skills to play a beat on the djembe. Help may be provided from peers or the instructor for students who have difficulty remembering the transitioning skills, but students who did not follow directions during the actual transition should not be allowed to play the djembe in order to avoid reinforcing inappropriate behavior. Congratulate students on a job well done over the course of the program and thank them for their participation.

Basketball Sessions

(Note: Objectives, discussion questions, and skill steps for each session were taken directly from Elliot and Gresham, 1991. Rules for transitioning and receiving constructive feedback were also taken directly from Elliot and Gresham, 1991 with slight modifications in wording to suit the situation.)

Day 1: Making transitions from one classroom activity to another without wasting time or disrupting others

Objective: The student will make transitions between classroom activities.

Materials: Two kid size basketballs, basketball goal, small portable white board, dry erase markers.

Step 1) Meet students at their classroom before walking over. Explain to students that all students who follow the rules for transitions without any slipups get to participate in shooting warmups when they get to the playground (reinforcement). Students who did not follow directions will be told that they will get to participate in shooting activities again after the discussion.

Rules for transitioning:

- Line up at the door when asked to do so by the teacher.
- No talking.
- Keep you hands to yourself.
- Stay in line and walk silently to your next class (no running)
- Wait silently in line at the edge of the playground for further instructions from your teacher.

Step 2) Walk over to the playground and instruct students to wait at the edge of the playground.

Step 3) State the rules for shooting warmups:

- Students stand in one line in front of the basket
- The first student in line shoots one time and then goes to retrieve the ball and pass it to the next person who doesn't have a ball.
- The second student must wait to shoot until the first student's ball has hit the ground after their shot. Then the second student shoots and retrieves his ball to pass to the next person.
- This continues for 3 minutes.

Step 4) After students have practiced shooting for 3 minutes, instruct the students to bring the basketballs to the teacher and sit down in a circle on the playground.

Step 5) Processing:

Why is it important to follow these rules when transitioning?

- Class runs better when students change tasks quickly and quietly.
- People have more time to learn when they don't waste time changing activities.
- Teachers can teach better when students change activities without being loud and distracting.
- Changing activities nicely shows respect for the teacher.

Identify the skill steps/have students repeat them

- When instructed to transition to a new activity, do so quickly and quietly.
- Listen to and follow your teacher's instructions.
- No talking.
- Keep you hands to yourself.
- Wait patiently for the teacher's instructions
- When transitioning to a new classroom, stay in line and walk silently to your next class (no running).

Step 6) Basketball Activity

- a) Transition into working on shooting skills. State "Now we're going to work on mental exercises to improve our shooting skills, so keep the transition skills in mind as we transition from our discussion to this new basketball activity." Remind students that they must follow directions throughout the activity in order to use the ball. If they engage in horseplay at any time, they will be asked to practice mentally on the side without the ball. Once they demonstrate that they can follow directions, they can earn the ball back.
- b) Instruct students to stand in front of the hoop and draw an imaginary target across the center of the basket. Tell students to close their eyes and imagine the center of the basket. Have them imagine the ball going through the center of the basket as they shoot.
- c) Give the ball to the first student in line. Have him repeat this process and shoot. Allow two shots for each student before passing the ball to the next person.
- d) Repeat this process until all students have taken two shots.
- e) Make it more challenging by having another one or two students stand a few feet in front of the student with his hands in the air to distract the students vision (without moving though so the shooter is not under too much pressure). Instruct students to repeat the same visualization process

and allow each student to take a couple more shots with one or two students standing in front of them.

- f) Ask students which is easier, shooting with or without someone trying to block you?
- g) To transition, allow each student to take one quick free shot.
- h) Tell students now we will play a game where each student will get to pick one spot on the court to shoot from. All the other students will get a chance to shoot from the same spot. This is an opportunity for them to practice their new shooting skills from different places on the court.
- i) Allow everyone a chance to pick a spot to shoot from and all the students practice shooting from each spot. Tell them they can use their new visualization strategy if they would like to but they don't have to.
- j) After everyone has finished allow students two at a time to take one more free shot.
- k) Instruct students to hand the basketballs to the teacher and sit back down in a circle on the pavement.

Step 7) Negative and Positive modeling:

- a) Review step 5. What are the skills that are necessary for students to transition successfully to a new activity?

Have students take turns reading the skill steps off the board:

- When instructed to transition to a new activity place, do so quickly and quietly.
- Listen to and follow your teacher's instructions.
- No talking.
- Keep you hands to yourself.
- Wait patiently for the teacher's instructions
- When transitioning to a new classroom, stay in line and walk silently to your next class (no running).

Tell students: We are transitioning now from playing basketball to having a discussion about what we learned from this activity.

Why is it important to practice these skills when transitioning between activities?

- Class runs better when students change tasks quickly and quietly.
- People have more time to learn when they don't waste time changing activities.
- Teachers can teach better when students change activities without being loud and distracting.
- Changing activities nicely shows respect for the teacher.

- b) Can anyone tell us what not to do when transitioning from playing basketball to having a discussion?

...e.g., try to take one last shot after the teacher tells you to line up, fight with another student over the ball, throw the ball over the fence, talk with other students, etc.

- c) Ask a student to roleplay as the teacher while you play the student. The student instructs you to bring the ball in and line up. After receiving this instruction, you model one of the above inappropriate behaviors for negative modeling.
- d) Next, have the student repeat the instruction and quietly ball in and line up.
- e) Ask the student what it felt like when he/she gave you an instruction and you didn't follow directions? What did it feel like when you did follow directions? After discussing, state, "Now you can see why it's important to develop transitioning skills in order to do well in class."

Step 8) Instruct to students to look at the board one more time before returning to class. Tell them there is a mini-basketball goal back at their classroom and students who follow directions during the transition and can remember at least one skill for transitioning when they get back to class will have a chance to take a shot at the mini-goal before starting their next class.

Step 9) Walk to next class with students. Show students the mini-basketball goal. Ask students to state one of the transition skills when they get back. Allow students who transitioned successfully and stated one of the transition skills to take a shot at the mini-goal. Encourage students to practice aiming the way they did earlier today. Help may be provided from peers or the instructor for students who have difficulty remembering the transitioning skills but those who did not follow directions during the actual transition should not be allowed to take a shot at the goal in order to avoid reinforcing inappropriate behavior. These students will be told that they will have another opportunity to take a shot at the mini-goal at the end of the next session if they do a better job of following directions.

Day 2 – Paying attention to and following teacher’s instructions

Objective: The student will pay attention to and follow teachers’ instructions.

Review: The student will make transitions between classroom activities.

Materials: 2 child-size basketballs, 1 adjustable basketball goal, portable white board and markers.

Step 1) Meet students at their classroom before walking over. Explain to students that all students who follow the rules for transitions without any slipups get to participate in shooting warmups when they get to the playground (reinforcement). Students who do not follow directions will be told that they will get to participate in today’s basketball activity after the discussion.

Rules for transitioning:

- Line up at the door when asked to do so by the teacher.
- No talking.
- Keep your hands to yourself.
- Stay in line and walk silently to your next class (no running)
- Wait silently in line at the edge of the playground for further instructions from your teacher.

Step 2) Walk over to the playground and instruct students to wait at the edge of the playground.

Step 3) State the rules for shooting warmups:

- Students stand in one line in front of the basket
- The first student in line shoots one time and then goes to retrieve the ball and pass it to the next person who doesn’t have a ball.
- The second student must wait to shoot until the first student’s ball has hit the ground after their shot. Then the second student shoots and retrieves his ball to pass to the next person.
- This continues for 3 minutes.

Step 4) After students have practiced shooting for 3 minutes, instruct the students to bring the basketballs to the teacher and sit down in a circle on the playground.

Step 5) Tell them:

Today we’re going to talk about how you can be better students by paying attention to your teacher and following your teacher’s directions.

- What do you think would happen in your class if the students refused to listen to your teacher's instructions on an assignment? (The students probably wouldn't learn; they wouldn't know what to do on the assignment and might do it incorrectly; and so on.)
- What are some things that happen when you listen to a teacher's directions (on an assignment for example)? (You learn what's going on; you learn when to do something, and so on.)
- Why don't you always listen to the teacher's instructions? (Sometimes you aren't paying attention; you may be doing something else; you may be distracted by sounds or noises; and so on.)
- How can you tell if someone is listening? (The person looks at the speaker and does what the speaker says.)
- What can you do if you're not sure what the teacher is saying? (You can raise your hand, ask questions, and so on.)

Step 6) Define the skill: Paying attention to the teachers' instructions by sitting quietly, looking at the teacher, thinking about what the teacher is saying, asking questions if you do not understand the instructions, and following directions.

Step 7) Identify the skill steps; have the students repeat them.

- A. Sit quietly and face your teacher.
- B. Look at your teacher's face and look interested.
- C. Think about what your teacher is saying.
- D. Decide if you understand the directions.
- E. If you don't understand what to do, ask questions.
- F. Follow your teacher's instructions

Step 8) Instruct students: Now we are going to a passing and receiving drill called Monkey-in-the-Middle (working on passing under pressure) and you're going to use these listening skills to make sure you know what the directions are.

Step 9) Before beginning, state the rules for Monkey-in-the-Middle. Remind students to use the listening skills just discussed when listening to the directions:

- a. In this drill, two (or more) offensive players stand about 10-15 feet apart.
- b. They are not allowed to move.
- c. The defender (the monkey-in-the-middle) tries to grab the ball or deflect the pass as the passer tries to pass it to the other offensive player.

- d. In order to complete the pass, the passer must fake the defender to create an opening.
- e. If the pass is completed the receiver must wait until the monkey-in-the-middle moves over to guard him before he can try to pass the ball back.
- f. Every 30 seconds one offensive player changes places with the “monkey.”
- g. Since this is a passing drill, there is no shooting. Just passing and receiving.
- h. Tell students: Tell students that if they forget one of these rules during the drill they will be reminded by the teacher, but if they engage in horseplay or deliberately choose not to follow instructions, they will be asked to sit out on the sidelines. They can earn back the opportunity to participate by encouraging their classmates from the sidelines (e.g., nice fake, etc.) and identifying the type of fakes other students use to create openings.

Monkeys-in-the-middle (Adaptation if more than three players in the group):

- a. Same rules as Monkey-in-the-Middle except there are three offensive players and two defensive players.
- b. One defensive player guards the person passing the ball and tries to deflect it while the other tries to steal the ball before it gets to one of the receivers.

Note: This can be adapted for up to 6 players as long as there are more offensive players than defensive players.

(Monkey-In-The-Middle exercise adapted from Mikes, 1987, p. 87).

Step 10) Ask if anyone has any questions about the rules.

Step 11) Choose 1-2 players to play defense and 2-3 to play offense.

Step 12) Tell them to start as soon as they have the ball. Rotate players from offense to defense every 30 seconds.

Step 13) After everyone has had a chance to play offense and defense, instruct students to hand the ball in and sit down in a circle. Briefly discuss whether or not everyone followed all the rules.

Step 14) Repeat this same exercise with one new rule—the offensive players are now allowed to dribble and move around. So the rules for the second version of this game are as follows:

- a. One defensive player guards the person passing the ball and tries to deflect it while the other tries to steal the ball before it gets to one of the receivers.
- b. The offensive players can dribble (if they pick up the ball they can pivot on one foot until they pass)
- c. If the pass is completed the receiver must wait until the monkey-in-the-middle moves over to guard him before he can try to pass the ball back.
- d. Every 30 seconds one offensive player changes places with the “monkey.”
- e. Since this is a passing drill, there is no shooting. Just passing and receiving.
- f. Tell students: Tell students that if they forget one of these rules during the drill they will be reminded by the teacher, but if they engage in horseplay or deliberately choose not to follow instructions, they will be asked to sit out on the sidelines. They can earn back the opportunity to participate by encouraging their classmates from the sidelines (e.g., nice fake, etc.) and identifying the type of fakes other students use to create openings.

Step 15) Ask if anyone has any questions about the new rules.

Step 16) Repeat steps 11 and 12.

Step 17) Briefly discuss whether or not everyone followed the new rules.

Step 18) Negative role-playing

Tell the students: Now we are going to do some role-playing to see what would happen if you didn't practice good listening skills. This time when I give you the new rules for the next version of this activity, I want you to talk to each other about lunch/recess, get up from where you're supposed to be sitting and move to a new spot, walk up to me to try to ask me to go to the bathroom, not paying any attention to me at all while I give you the new instructions. We will start the roleplay when I say “Go.” Once I'm done giving the instructions, I will say “STOP,” and then I will tell you to begin passing drill again according to the new instructions.

Step 19) Say, “Go.” While students are role-playing poor classroom behavior give the new instructions:

- a. This time, One defensive player guards the person passing the ball and tries to deflect it while the other tries to steal the ball before it gets to one of the receivers.
- b. The offensive players are not allowed to dribble, but receivers can move around to get open for a pass.
- c. After the first pass is completed, the offensive team is allowed to shoot the ball at the hoop.
- d. Every 30 seconds one offensive player changes places with the “monkey.”

Step 20) After giving the instructions say “STOP.” Then pick players to play offense and defense and instruct students to begin according to the new instructions.

Step 21) Switch players from offense to defense every 30 seconds. If students are playing together without any problems (e.g., no fighting over the rules), let them continue for 1-2 minutes even if they aren’t following the new rules perfectly. If there is confusion about the rules, instruct students to hand the ball in and sit back down in the circle. Ask the group, “What were the rules for this drill?” Briefly discuss whether or not everyone followed the new rules. “What happens when you don’t use good listening skills while a teacher is giving instructions?” Briefly discuss.

Step 22) Instruct to students to look at the board one more time before returning to class. Tell them there is a mini-basketball goal back at their classroom and students who follow directions during the transition and can remember at least one skill for transitioning when they get back to class will have a chance to take a shot at the mini-goal before starting their next class.

Step 23) Walk to next class with students. Show students the mini-basketball goal. Ask students to state one of the transition skills when they get back. Allow students who transitioned successfully and stated one of the transition skills to take a shot at the mini-goal. To add novelty and keep students interested, use a visual aid of a popular basketball player as a visual distraction to make it more challenging to aim (hold the visual to the side of the goal while the student practices aiming). Help may be provided from peers or the instructor for students who have difficulty remembering the transitioning skills but those who did not follow directions during the actual transition should not be allowed to take a shot at the goal in order to avoid reinforcing inappropriate behavior. These students will be told that they will have another opportunity to take a shot at the mini-goal at the end of the next session if they do a better job of following directions.

Day 3 – Receiving criticism/feedback well

Objective: The student will receive criticism/feedback well.

Review: The student will make transitions between classroom activities.

Review: The student will pay attention to and follow teachers' instructions.

Materials: One basketball, one basketball goal, portable white board and markers.

Step 1) Meet students at their classroom before walking over. Explain to students that all students who follow the rules for transitions without any slipups both on the way to the playground and the way back to the classroom will get to play get to take a shot at the mini-basketball goal when they get back to their classroom (reinforcement). Ask students if they remember the rules for transitioning. Supply any rules that they forget.

Rules for transitioning:

- Line up at the door when asked to do so by the teacher.
- No talking.
- Keep you hands to yourself.
- Stay in line and walk silently to your next class (no running)
- Wait silently in line at the edge of the playground for further instructions from your teacher.

Step 2) Walk over to the playground and instruct students to wait at the edge of the playground.

Step 3) Tell the students they will be practicing a point guard drill today to practice leadership and communication on the court. Remind them that while they listen to the instructions for the first activity then need to:

- A. Sit quietly and face your teacher.
- B. Look at your teacher's face and look interested.
- C. Think about what your teacher is saying.
- D. Decide if you understand the directions.
- E. If you don't understand what to do, ask questions.
- F. Follow your teacher's instructions

Step 4) State the instructions/rules for the first activity:

Each of you will take turns playing point guard in order to practice leadership and communication skills . Your goals as point guard are:

- a) Protect the ball
- b) Keep your head up so you can see an open player

- c) Fake to create an opening and...
 - a. A) Pass to an open player
 - b. B) Drive to the basket and try to score or take a shot if open
- d) Note: Part of this exercise is to decide what's best for the team. Driving to the basket/taking a shot yourself or passing to an open player.

Tell students a couple of them will have a chance to lead now to warm up and then everyone will try it later after our discussion.

Step 5) Ask if there are any questions about the rules. Clarify if necessary.

Step 6) After questions have been answered, divide the group in half with two or three players practicing on offense and two on defense.

Step 7) Hand the ball to the first point guard and tell them to “check” the ball (pass to the defense player who passes it back to them) to put the all into play. Provide feedback when necessary. Allow students to practice for a couple of rounds to warm up.

Step 8) Instruct students to hand the ball in and come stand in a circle.

Step 9) Introduce the skill and ask questions about it: Today as we're learning how to lead, we're going to talk about how we accept feedback or constructive criticism because it makes you a better leader, a better basketball player, and a better student if you can accept feedback and use that feedback to improve your performance.

- Have you ever received constructive criticism for something? What were you given feedback on?
- What does the word *feedback* mean? What is constructive criticism?
- Why do people give each other constructive criticism?
- What are some ways people give each other feedback? What examples can you give me of constructive and nonconstructive criticism?
- What happens when someone like a teacher or a parent provides constructive criticism and you get mad?
- What are some ways we have used constructive criticism in this group?

Step 10) Highlight important points of this skill: Responding to constructive feedback by listening to it, remaining calm, recognizing the intent of the message the person doing the criticizing is giving you, and changing your actions based on the feedback.

Step 11) Discuss why the skill is important

- Many times you can learn to do something better if you listen to constructive criticism.
- The intent of constructive criticism is to make you more successful as you do something.
- Constructive criticism can be useful if you listen to the message the person is trying to give you.

Step 12) Identify these skill steps; have students repeat them.

- F. Establish eye contact with the person who is providing feedback.
- G. Listen to what the person is saying.
- H. Decide what the message is. Ask yourself, “Is this feedback constructive or nonconstructive?”
- I. If feedback is constructive, take feedback and try again.
- J. Ask questions if you don’t understand what to do.

Step 13) Instruct students that they will now each have an opportunity to play point guard. This time each student will receive feedback about their leadership and communication skills and how well they executed the point guard skills stated in the instructions.

Step 14) Review the goals for the point guard:

- a) Protect the ball
- b) Keep your head up so you can see an open player
- c) Fake to create an opening and...
 - a. A) Pass to an open player
 - b. B) Drive to the basket and try to score or take a shot if open
- d) Note: Part of this exercise is to decide what’s best for the team. Driving to the basket/taking a shot yourself or passing to an open player.

Step 15) Ask if anyone has questions about the instructions. Once questions are answered, hand the first point guard a basketball and say “Go!”

Step 16) Give the first person a couple of opportunities to play point guard position before instructing students to hand the ball in.

Step 17) Instruct students to stand in a circle and tell them now it is time to give the point guard feedback on how they did.

Step 18) The researcher will remind the student receiving feedback to:

- F. Establish eye contact with the person who providing feedback.
- G. Listen to what the person is saying.

- H. Decide what the message is. Ask yourself, “Is this feedback constructive or nonconstructive?”
 - I. If criticism is constructive, thank the person providing the feedback and tell them that you will keep that in mind next time you have the opportunity to lead.
 - J. Ask questions about the feedback if you don’t understand.
- Step 18) Instruct students to think about what the leader did well and what they could improve on. Instruct students to raise their hands in order to provide the leader with feedback. Allow time to discuss a couple of comments and provide additional feedback if time permits. Provide prompts for students to make good eye contact if necessary.
- Step 19) Ask the leader if they have any questions and provide additional clarification on feedback if necessary.
- Step 20) Repeat steps 15-19 with the remaining students.
- Step 21) Instruct to students to look at the board one more time before returning to class. Tell them there is a mini-basketball goal back at their classroom and students who follow directions during the transition and can remember at least one skill for transitioning when they get back to class will have a chance to take a shot at the mini-goal before starting their next class.
- Step 22) Walk to next class with students. Show students the mini-basketball goal. Ask students to state one of the transition skills when they get back. Allow students who transitioned successfully and stated one of the transition skills to take a shot at the mini-goal. Encourage students to practice aiming skills they learned previously. Help may be provided from peers or the instructor for students who have difficulty remembering the transitioning skills but those who did not follow directions during the actual transition should not be allowed to take a shot at the goal in order to avoid reinforcing inappropriate behavior. These students will be told that they will have another opportunity to take a shot at the mini-goal at the end of the next session if they do a better job of following directions.

Day 4 – Cooperating with peers without prompting

Objective: Without prompting, the student will cooperate with others by listening, sharing ideas, making positive comments, helping others, and encouraging others.

Review: The student will make transitions between classroom activities.

Review: The student will pay attention to and follow teachers’ instructions.

Review: The student will receive criticism/feedback well.

Materials: One basketball, basketball hoop, whistle, whiteboard with markers.

Step 1) Meet students at their classroom before walking over. Explain to students that all students who follow the rules for transitions without any slipups both on the way to the playground and on the way back to the classroom will get to take a shot at the mini-basketball goal when they return to the classroom (reinforcement). Ask students if they remember the rules for transitioning. Supply any rules that they forget.

Rules for transitioning:

- Line up at the door when asked to do so by the teacher.
- No talking.
- Keep you hands to yourself.
- Stay in line and walk silently to your next class (no running)
- Wait silently in line at the edge of the playground for further instructions from your teacher.

Step 2) Walk over to the playground and instruct students to wait at the edge of the playground.

Step 3) Tell them today we're going to talk about cooperation. When people cooperate, they can accomplish a lot more than when they don't cooperate. So today, to warm up, we're going to work on scoring points individually and as a team to see how teamwork works in basketball.

Step 4) Before giving instructions, remind students of the skills they learned previous for following instructions:

Following Directions:

- A. Sit quietly and face your teacher.
- B. Look at your teacher's face and look interested.
- C. Think about what your teacher is saying.
- D. Decide if you understand the directions.
- E. If you don't understand what to do, ask questions.
- F. Follow your teacher's instructions

Step 5) State the instructions for the activity:

- For the first round, I will need one volunteer to play all-time defense. The rest of you will take turns trying to score on the defensive player. The all-time defense player will get to pick one person at the end to take his place so he can take his turn. Then he will go back on defense again for the second round.
- Each offensive player gets 30 seconds, similar to the shot clock in basketball, to score on the defensive player.

- No double dribble, no walking with the ball, and no fouls. If you're playing defense, you can only touch the ball or block the offensive player's ability to get to the basket. No hitting or pushing.

Step 6) Ask if anyone has any questions about the instructions and clarify if necessary.

Step 7) Ask for a volunteer who thinks they're really good at defense to be the all-time defense player and have the rest of the students get in a line to take turns playing offense.

Step 8) Set stop watch and remind students that they each have 30 seconds to score and it will be the next person's turn. Tell them they can start when you hand the offensive player the ball.

Step 9) Hand the offensive player the ball and start the stop watch. If after 30 seconds the offensive player hasn't scored, blow the whistle and instruct them to pass the ball to the next offensive player.

Step 10) Continue until everyone (including the all-time defensive player) has had a chance to try to score.

Step 11) After everyone has gone, instruct the students that they will do the same thing now (same person on all-time defense) except now two offensive players at a time will play against one defensive player.

Step 12) Repeat steps 9-10.

Step 13) After everyone has gone, instruct the students that they will do the same thing now (same person on all-time defense) except now three offensive players at a time will play against one defensive player.

Step 14) Repeat steps 9-10.

Step 15) After the last group has attempted to score, instruct the students to hand in the ball and sit down in a circle on the playground.

Step 16) Ask them which was easier? Trying to score in one on one, two on one, or three on one?

Step 17) Say, "This activity shows how things get easier when you work as a team. The way this was set up, the teams were unequal in number so the offensive players had a clear advantage. But even when the teams are equal, you can create this type of situation to gain an advantage by using teamwork. For example, when your teammate blocks the person who is defending you so you can take an easy shot, your team gains the advantage."

Step 18) Introduce the skill and ask questions about it: Today we're going to talk about how you can get along with other students by cooperating with them.

- What does the word *cooperate* mean?
- Why do people cooperate? (They want to finish a task, achieve a goal, and so on.)
- What are some things people might do to show they are cooperating? (They might work together in a friendly way, listen well, make positive comments to others, help each other, and so on.)
- What are some things people do that show they are not cooperating? (They argue, refuse to listen, act selfish, say bad things to others, and so on.)
- What are some good things that can happen when people cooperate? (The people finish a job, get more done, get something done better, feel good about the group and themselves, and so on.)
- What can happen when people don't cooperate? (They might not finish a job; they might be unhappy with the results; and so on.)

Step 15) Define the skill: Cooperating with peers by listening, sharing ideas, making positive comments, helping others, and encouraging others.

Step 16) Discuss why the skill is important (maybe a little redundant)

- Most times you can get more done when people chip in and cooperate.
- Many times you can do something better when people cooperate on something.
- By cooperating, each person has less to do than if he or she did the project alone.
- By cooperating, each person has less to do than if he or she did the project alone.
- Lots of times, you can learn from others by being involved in a cooperative project.

Step 17) Identify these skill steps; have students repeat them.

- E. Identify ways you can cooperate, such as taking turns, sharing and having each person do a separate thing.
- F. Decide who will be first and who will do what
- G. Encourage each other by making positive comments, smiling, using the "thumbs up" gesture, and so on. Do this until you have finished the task or have reached the group's goal.
- H. Congratulate each other when you finish the task.

Step 18) Basketball Activity: Instruct students, "Now we're going to have a team scrimmage with a little twist from normal basketball rules. We will have even teams and we're going to play for about 10 minutes. When you score, you will get one point for the number of teammates that touched the ball before you scored. This encourages passing and teamwork. So if there are three people on

your team, you can get a maximum of three points every time you score if everyone on your team touches the ball at least once.”

Step 19) Divide the group into two teams. Tell students you will simulate a tipoff by shooting the ball off of the backboard and letting them rebound to see who gets the ball first.

Step 20) Allow the two teams to play for 10 minutes. Stop the group if any violations occur (e.g., fouls, double dribble, etc.) and give the ball to the appropriate team.

Step 21) When the time runs out, instruct the students to hand in the ball and sit down on the playground.

Step 22) Tell the group that you will now give each of them brief feedback on how well they did at working together as a team. Remind them of the skills for receiving feedback:

Receiving Feedback:

- A. Establish eye contact with the person who providing feedback.
- B. Listen to what the person is saying.
- C. Decide what the message is. Ask yourself, “Is this feedback constructive or nonconstructive?”
- D. If criticism is constructive, thank the person providing the feedback and tell them that you will keep that in mind next time you have the opportunity to lead.
- E. Ask questions about the feedback if you don’t understand.

Give each student brief feedback on how well they worked with others as a team. Note whether you observed them passing the ball to others and letting them score if they tried to score all the points on their own without passing the ball.

Step 23) Negative role-playing: Instruct students that they will now do the same thing one more time except this time they will be asked to role-play poor teamwork skills. So this time, even though they get more points for passing the ball and working together, they should try to hold onto the ball and focus on being the leading scorer for their team. They should ignore their teammates suggestions to pass the ball.

Step 24) Start the game by simulating a tipoff like before. Let the two teams plays for a few minutes until they’ve scored a few points and gotten a feel for the difference they see both in points and the morale of their team when they focus on being the points leader instead of focusing on working together as a team and passing the ball.

Step 25) End role-play and ask students to describe what happens when they focus only on themselves instead of cooperating with each other. How does this relate to

cooperating with each other and their teacher in the classroom (e.g., if they're all trying to get the teacher's attention at the same time or being disruptive)?

- The teacher has to stop the class and wait for students to get back on task
- Less work is accomplished when people are uncooperative with each other
- Students lose privileges when time is wasted

Step 26) Instruct to students to look at the board one more time before returning to class. Tell them there is a mini-basketball goal back at their classroom and students who follow directions during the transition and can remember at least one skill for transitioning when they get back to class will have a chance to take a shot at the mini-goal before starting their next class.

Step 27) Walk to next class with students. Show students the mini-basketball goal. Ask students to state one of the transition skills when they get back. Allow students who transitioned successfully and stated one of the transition skills to take a shot at the mini-goal. Encourage students to practice aiming skills they learned previously. Ask one student per shooter to take turns making a silly face to try to distract the shooter. Help may be provided from peers or the instructor for students who have difficulty remembering the transitioning skills but those who did not follow directions during the actual transition should not be allowed to take a shot at the goal in order to avoid reinforcing inappropriate behavior. These students will be told that they will have another opportunity to take a shot at the mini-goal at the end of the next session if they do a better job of following directions.

Day 5 – Review

Review: The student will make transitions between classroom activities.

Review: The student will pay attention to and follow teachers' instructions.

Review: The student will receive criticism/feedback well.

Review: Without prompting, the student will cooperate with others by listening, sharing ideas, making positive comments, helping others, and encouraging others.

Materials: Four basketballs, one basketball goal

Step 1) Meet students at their classroom before walking over. Explain to students that all students who follow the rules for transitions without any slipups both on the way to the playground and on the way back to the classroom will get to take a shot at the mini-basketball goal when they return to their classroom (reinforcement). Ask students if they remember the rules for transitioning. Supply any rules that they forget.

Rules for transitioning:

- Line up at the door when asked to do so by the teacher.
- No talking.
- Keep your hands to yourself.
- Stay in line and walk silently to your next class (no running)
- Wait silently in line at the edge of the playground for further instructions from your teacher.

Step 2) Walk over to the playground and instruct students to wait at the edge of the playground.

Step 3) Tell students today is going to be all review. We've talked about transitioning, paying attention to and following teacher's instructions, responding to constructive criticism, and cooperating with others. We're going to start with shooting warmups today, and we're going to practice aiming like we did the first day, however, the rules will be a little different from the first time we practiced shooting warmups.

Step 4) Remind students of the skills for paying attention to directions:

Following Directions:

- G. Sit quietly and face your teacher.
- H. Look at your teacher's face and look interested.
- I. Think about what your teacher is saying.
- J. Decide if you understand the directions.
- K. If you don't understand what to do, ask questions.

L. Follow your teacher's instructions

Step 5) State the rules for shooting warmups:

- Students will each have their own ball (or they will share four balls depending on number of students).
- You do not have to wait in line to shoot. Just be mindful of other people and try not to shoot at the exact same time as someone else so that you don't knock someone else's ball out.
- Remember to practice aiming like you did on the first day.
 - Draw an imaginary target across the center of the basket.
 - Close your eyes and imagine the center of the basket. Imagine the ball going through the center of the basket.
 - Open your eyes and shoot.

Step 6) Allow students to practice shooting for 3-5 minutes.

Step 7) Instruct students that they will now practice cooperation skills while working on shooting under pressure. They will be taking turns faking and shooting against an all time defense player.

Step 8) Remind students of the cooperation skills they learned previously:

Cooperating w/ Other without Prompting

- E. Identify ways you can cooperate, such as taking turns, sharing and having each person do a separate thing.
- F. Decide who will be first and who will do what
- G. Encourage each other by making positive comments, smiling, using the "thumbs up" gesture, and so on. Do this until you have finished the task or have reached the group's goal.
- H. Congratulate each other when you finish the task.

Step 9) Ask students to identify ways they can be cooperative, e.g., complimenting each other ("Nice block," "Nice fake," "Nice shot"); following instructions; being a good sport; etc.

Step 10) State instructions for the activity:

- For each round, one student will play defense against all of the other students. After all the other students have attempted to shoot, a new student will be chosen to play defense for the next round.
- Each student gets one shot on the defensive player. In order to create an opening to shoot, they must fake their opponent out to get them out of the way—e.g., head fake, pump fake, etc.

- After each student shoots, they pass the ball to the next offensive player and go to the end of the line to wait for the next round.

Step 11) Choose one player to play defense and instruct the remaining students to get in line. Hand the ball to the first player and let them begin. After everyone has attempted to score, choose a new defensive player and begin again. Continue until everyone has played defense.

Step 12) At the end of this exercise, briefly process with students about cooperative behaviors that you observed. Then instruct the students that they will now review what they learned about receiving constructive criticism. To end the day, they will scrimmage against each other following the additional rule that they can score more points if each player on their team touches the ball before they score.

Step 13) Remind students of the skills needed for receiving constructive criticism:

Receiving Constructive Criticism:

- Establish eye contact with the person who is providing feedback.
- Listen to what the person is saying.
- Decide what the message is. Ask yourself, “Is this feedback constructive or nonconstructive?”
- If feedback is constructive, take feedback and try again.
- Ask questions if you don’t understand what to do.

Step 14) State the rules for the scrimmage:

- When you score, you will get one point for every teammates that touched the ball before you scored. This encourages passing and teamwork. So if there are three people on your team, you can get a maximum of three points every time you score if everyone on your team touches the ball at least once.
- Typical rules for basketball apply, e.g., no double dribble, traveling, fouls, etc. The researcher will serve as the referee.

Step 15) Divide the group into two teams. Simulate a tipoff by shooting the ball off of the backboard and letting them rebound to see who gets the ball first.

Step 16) Allow the two teams to play for 10 minutes. Stop the group if any violations occur (e.g., fouls, double dribble, etc.) and give the ball to the appropriate team.

Step 17) Give each student brief feedback on how well they worked with others as a team. Note whether you observed them passing the ball to others and letting them score if they tried to score all the points on their own without passing the ball. Also give each student brief feedback about how their behavior in this activity relates to their behavior throughout the entire program. Focus mostly on strengths and give a couple of suggestions for things they can improve upon.

- Step 18) Instruct to students to look at the board one more time before returning to class. Tell them there is a mini-basketball goal back at their classroom and students who follow directions during the transition and can remember at least one skill for transitioning when they get back to class will have a chance to take a shot at the mini-goal before starting their next class.
- Step 19) Walk to next class with students. Show students the mini-basketball goal. Ask students to state one of the transition skills when they get back. Allow students who transitioned successfully and stated one of the transition skills to take a shot at the mini-goal. Encourage students to practice aiming skills they learned previously. Allow students to decide whether or not they want the challenge of a distraction or if they just want to practice one more time without distractions. Help may be provided from peers or the instructor for students who have difficulty remembering the transitioning skills but those who did not follow directions during the actual transition should not be allowed to take a shot at the goal in order to avoid reinforcing inappropriate behavior. Congratulate students on a job well done over the course of the program and thank them for their participation.